CONTRACT DOCUMENTS AND SPECIFICATIONS

SMALL STRUCTURE 22013

EAST 196TH STREET / UNKNOWN STREAM

NOBLESVILLE TOWNSHIPS

HAMILTON COUNTY, INDIANA

PB – 19 – 0004

Aaron Goslee, P.E.

AARON M. GOSLEE
REGISTERED
No.
PE11100088
STATE OF
INDIANA
PROFESSIONAL ENGINEER

Prepared For:
Hamilton County Highway Department
1700 South 10th Street
Noblesville, Indiana 46060
Tel: 317-773-7770

Prepared By:
SJCA Inc.
9102 N. Meridian Street, Suite 200
Indianapolis, IN 46260
Tel: 317-566-0629

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NOTICE TO BIDDERS

Notice is hereby given that the Board of Commissioners of Hamilton County, Indiana; hereinafter referred to as the *OWNER*, will receive sealed bids for the following project:

REPLACEMENT PLAN FOR SMALL STRUCTURE 22013
EAST 196TH STREET OVER UNKNOWN STREAM
NOBLESVILLE TOWNSHIP
HAMILTON COUNTY, INDIANA
PB-19-0004

Proposals may be forwarded individually by registered mail or delivered in person, addressed to the Hamilton County Auditor, 33 North 9th Street, Suite L21, Noblesville, Indiana, 46060, until **12:30 p.m., June 14**, **2021**. After 12:30 p.m. they can be delivered to the Auditor in the Hamilton County Commissioners Courtroom up to the time of the noticed bid opening. Only proposals from those *CONTRACTOR*S who are registered on the Indiana Department of Transportation's current listing of Prequalified Contractors for item D(A) "Bridges: Highway Over Water" will be considered. Any bids submitted by *CONTRACTORS* not approved for this item on the list will be returned to the bidder unopened.

All proposals will be considered by the *OWNER* at a public meeting held in the Hamilton County Government & Judicial Center in Noblesville, Indiana, Commissioners' Courtroom, and opened and read aloud at **1:45 p.m. local time, June 14, 2021.**

The work to be performed and the proposals to be submitted shall include a bid for all general construction, labor, material, tools, equipment, taxes, permits, licenses, insurance, service costs, etc. incidental to and required for this project.

All materials furnished and labor performed incidental to and required by the proper and satisfactory execution of the contracts to be made, shall be furnished and performed in accordance with requirements from the drawings and specifications included in these documents.

Bidding documents will be available beginning at **9:00 am. on May 12, 2021**. Copies of the Proposal, Specifications, Contract Documents and Plans must be obtained from SJCA Inc. or contact Aaron Goslee, P.E., at agoslee@sjcainc.com for further information. **Cost for obtaining the Contract Document & Plans from SJCA Inc. will be $75.00 and made payable to SJCA Inc. (by check only).** Payments and costs of Contract Documents are non-refundable. Interested parties can view the Contract Documents online at www.hamiltoncounty.in.gov. Documents posted on the county website are for informational purposes only. It shall be the responsibility of the individual to periodically check for addendums posted online. Contract Documents and Plans must be obtained through SCJA Inc. to be eligible to bid on this contract.

Each proposal must be enclosed in a sealed envelope with the county supplied sealed bid notice, bearing the title of the project, bid opening date and the name and address of the bidder firmly affixed. **The bidder shall affix identifying tabs to the following sheets of each proposal:**

- **Form 96**
- **Non-Collusion Affidavit**
- **Bid Bond**
- **Financial Statement**
- **Itemized Proposal**
- **Receipt of Addendum (if applicable)**
- **Employment Eligibility Verification**
- **Drug Testing Program Compliance**

Each individual proposal shall be accompanied by a certified check or acceptable ***Bidder's Bond,*** made payable to the Hamilton County Auditor, in a sum of not less than ***ten percent*** of the total amount of the proposal, which check or bond will be held by the said Hamilton County Auditor as evidence that the bidder will, if awarded a contract, enter into the same with the *OWNER* upon notification from him to do so within ten days of said notification. Failure to execute the contract and to furnish performance bond to Hamilton County, Indiana, will be cause for forfeiture of the amount of money represented by the certified check, or bidder's bond, as and for liquidated damages. Form 96, as prescribed by the Indiana State Board of Accounts, shall be properly completed, and submitted with bid proposals. The Commissioners at their discretion reserve the right to waive any and all informalities in the bidding. All bids submitted shall be valid for 90 days from the opening of the bids.

Robin M. Mills
Hamilton County Auditor

Dated: April 30, 2021
Hamilton County Reporter: **May 17, 2021 and May 24, 2021**
Noblesville Times: **May 12, 2021 and May 19, 2021**

BID SEAL
< NOTICE >

Sealed Bid Documents shall contain on the outside of the sealed envelope the following completed self-sticking label:

SEALED BID DOCUMENTS

(To be completed by bidder before submission)

Equipment Type _____

Annual Bid Category #
Road Contract # / Bridge #
(Desc.) _____

(Circle One)

Name of Bidder: _____

Bid Opening Date: _____

Other Documents Enclosed:

Bid Bond	(Y)	(N)
Certified Check	(Y)	(N)
Form HC BID 06 / 03	(Y)	(N)
Form 96	(Y)	(N)
Other	_____	

For Hamilton County Use Only!
Received by the Auditor
File Stamp

Time Received: _____

All mailer packers will be opened upon receipt.
Make sure the sealed envelope is contained within.

< NOTICE >

PROPOSAL

To the Board of County Commissioners of Hamilton County, of the State of Indiana; hereinafter referred to as OWNER:

REPLACEMENT PLAN FOR SMALL STRUCTURE 22013
EAST 196TH STREET OVER UNKNOWN STREAM
NOBLESVILLE TOWNSHIP
HAMILTON COUNTY, INDIANA

Pursuant to the legal notice that sealed proposals for the above project would be received by the Board of County Commissioners of Hamilton County, Indiana,

The undersigned hereby tenders this bid to construct the work in accordance with the plans, profiles, drawings, specifications, and all authorized revisions for this contract which are on file in the office of the Hamilton County Highway Department; and to furnish all necessary machinery, equipment, tools, labor and other means of construction and to furnish all material specified in the manner and at the time prescribed and under the supervision and direction of the OWNER or his duly authorized representative and pursuant to the terms of the Performance Bond and the Payment Bond in the amount of not less than One Hundred Percent (100%) of the amount of the Proposal, for the unit prices given on the attached Itemized Proposal dated May 12, 2021.

Together with this PROPOSAL, the undersigned has:

Filed an Itemized Proposal with a unit price for each item listed, together with a total amount for all items, based upon the unique characteristics of this contract;

Executed the Form No. 96 filed herewith;

Filed a properly executed Bid Bond or certified check made payable to the Hamilton County Treasurer herewith in an amount greater than or equal to ten percent (10%) of the total amount of this proposal;

Executed the Non-Collusion affidavit filed herewith;

Executed the Legal Status of Bidder Form filed herewith;

Filed a current Financial Statement herewith;

If awarded the contract, the undersigned promises to prosecute the work so as to complete the contract within the time specified in the Special Provisions.

Witness our hands this_____day of,_____20___.

Firm Name :_____

Address :_____

_____

_____

By :_____
(Signature)

Name :_____
(Printed)

Title :_____
(Printed)

ITEMIZED PROPOSAL

Replacement Plan for Small Structure 22013
East 196th Street over Unknown Stream
Noblesville Township
Hamilton County, Indiana

ITEMIZED PROPOSAL DATE: _____May 11, 2021_____

LETTING DATE: _____June 14, 2021_____

CONTRACTOR: _____

SCHEDULE OF PAY ITEMS

LINE NO	ITEM DESCRIPTION	INDOT / SP #	UNITS	QTY	UNIT PRICE		BID AMOUNT	
					DOLLARS	CENTS	DOLLARS	CENTS
1	CONSTRUCTION ENGINEERING	105	LS	1.0				
2	MOBILIZATION AND DEMOBILIZATION	110	LS	1.0				
3	CLEARING RIGHT OF WAY	201 / SP16	LSUM	1.0				
4	PRESENT STRUCTURE, REMOVE	202	LSUM	1.0				
5*	EXCAVATION, COMMON	203	CYS	303.0				
6*	BORROW	203	CYS	333.0				
7	SEDIMENT, REMOVE	205	CYS	10.0				
8	TEMPORARY CHECK DAM, REVETMENT RIPRAP	205	TON	6.0				
9	TEMPORARY INLET PROTECTION	205	EACH	2.0				
10	FILTER SOCK	205	LFT	145.0				
11	TEMPORARY CHECK DAM, TRAVERSABLE	205	LFT	42.0				
12	SUBGRADE TREATMENT, TYPE III	207	SYS	563.0				

LINE NO	ITEM DESCRIPTION	INDOT / SP #	UNITS	QTY	UNIT PRICE		BID AMOUNT	
					DOLLARS	CENTS	DOLLARS	CENTS
14	STRUCTURE BACKFILL, TYPE 5	211	CYS	254.0				
15	COMPACTED AGGREGATE NO 5	301	CYS	23.0				
16	COMPACTED AGGREGATE NO 53	303	TON	325.0				
17	JOINT ADHESIVE, SURFACE	401	LFT	1200.0				
18	JOINT ADHESIVE, INTERMEDIATE	401	LFT	1200.0				
19	HMA SURFACE, TYPE B, 9.5 mm	402 / SP21	TON	79.0				
20	HMA INTERMEDIATE, TYPE B, 19.0 mm	402 / SP21	TON	132.0				
21	HMA BASE, TYPE B, 25.0 mm	402 / SP21	TON	127.0				
22	ASPHALT FOR TACK COAT	406	SYS	1914.0				
23	MAILBOX ASSEMBLY, SINGLE	611	EACH	1.0				
24	MONUMENT SECTION CORNER INSTALL	615	EACH	1.0				
25	RIGHT-OF-WAY MARKER	615	EACH	10.0				
26	MONUMENT, B	615	EACH	2.0				
27	RIPRAP, CLASS 1	616	TON	108.0				
28	RIPRAP, REVETMENT	616	TON	7.0				
29	GEOTEXTILE FOR RIPRAP TYPE 1A	616	SYS	441.0				
30	MOBILIZATION AND DEMOBILIZATION FOR SEEDING	621	EACH	2.0				

LINE NO	ITEM DESCRIPTION	INDOT / SP #	UNITS	QTY	UNIT PRICE		BID AMOUNT	
					DOLLARS	CENTS	DOLLARS	CENTS
31	EROSION CONTROL BLANKET	621	SYS	511.0				
32	MULCHED SEEDING, R	621 / SP22	SYS	1726.0				
33	WATER	621	Kgal	2.1				
34	STRUCTURE, REINFORCED CONCRETE, BOX SECTIONS, 12 FT. X 5 FT.	714	LFT	88.0				
35	PIPE, TYPE 2, CIRCULAR, 15 IN.	715	LFT	122.0				
36	PIPE, TYPE 3, CIRCULAR, 15 IN.	715	LFT	34.0				
37	PIPE END SECTION, DIAMETER 15 IN.	715	EACH	2.0				
38	INLET, F7	720	EACH	2.0				
39	ROAD CLOSURE SIGN ASSEMBLY	801 / SP25	EACH	4.0				
40	DETOUR ROUTE MARKER ASSEMBLY	801 / SP24	EACH	16.0				
41	CONSTRUCTION SIGN, A	801	EACH	7.0				
42	MAINTAINING TRAFFIC	801	LSUM	1.0				
43	BARRICADE, III-A	801	LFT	48.0				
44	BARRICADE, III-B	801	LFT	48.0				
45	LINE, PAINT, BROKEN, YELLOW, 4 IN.	801	LFT	100.0				
46	LINE, PAINT, SOLID, YELLOW, 4 IN.	808	LFT	400.0				
					Total			

*Quantity Shown to be the Final Pay Quantity

PRINTED TOTAL

SUBMITTED BY: _____

SIGNATURE: _____

PRINTED NAME: _____

TITLE: _____

ADDRESS: _____

_____

_____

BID BOND

KNOWN BY ALL PERSONS BY THESE PRESENTS THAT THE UNDERSIGNED:

BIDDER :_____

_____

as principal, and

SURETY: [Name] _____

[Address] _____

_____

as Surety,

are firmly bound unto Hamilton County, Indiana in the full and just sum of an amount equal to TEN PERCENT of the amount of the Principal's bid, to the payment of which, well and truly to be made, we bind ourselves jointly and severally, and our joint and several heirs, executors, administrators and assigns, firmly by these presents.

THE CONDITIONS OF THE ABOVE OBLIGATIONS ARE SUCH THAT, whereas, the Principal is herewith submitting a bid and proposal for construction and completion of this contract in accordance with plans and specifications, which are made part of this bond;

NOW, THEREFORE, if Hamilton County shall award the Principal the contract and the Principal shall promptly, enter into contract with Hamilton County, then this obligation shall be void; otherwise to remain in full force, virtue, and effect.

IT IS AGREED that no modifications, omissions, or additions in or to the terms of such contract or in or to the plans or specifications therefor shall affect the obligation of such sureties on this bond.

IN WITNESS WHEREOF, we hereto set our hands and seals:

< <BIDDER > >

(Bid Bond)

_____
(Signature)

_____
(Printed)

_____
(Title)

State of Indiana, County of,_____, SS:
Before me, the undersigned Notary Public, personally appeared;
_____ As Principal and acknowledged the execution of the above bond on this_____Day of _____, 20___.
My commission Expires:_____

_____
(County of Residence)_____(Notary Signature & Seal)

< <SURETY > >

(Bid Bond)

_____
(Signature)

_____
(Printed)

_____
(Title)

State of Indiana, County of, , SS:
Before me, the undersigned Notary Public, personally appeared;
_____ As Principal and acknowledged the execution of the above bond on this_____Day of_____, 20___.
My commission Expires:

_____
(County of Residence) (Notary Signature & Seal)

PAYMENT BOND

KNOWN BY ALL PERSONS BY THESE PRESENTS THAT THE UNDERSIGNED:

BIDDER:_____

_____

as principal, and SURETY:

[Name] _____

[Address] _____

_____

as Surety,

are firmly bound unto Hamilton County, Indiana in the penal sum of an amount equal to ONE HUNDRED PERCENT of the amount of the Principal's bid, to the payment of which, well and truly made, we bind ourselves jointly and severally, and our joint and several heirs, executors, administrators and assigns, firmly by these presents.

THE CONDITIONS OF THE ABOVE OBLIGATIONS ARE SUCH THAT, whereas, the Principal is herewith submitting a bid and proposal for construction and completion of this contract in accordance with plans and specifications, which are made part of this bond;

NOW, THEREFORE, if Hamilton County shall award the Principal the contract for work and the Principal shall promptly enter into contract with Hamilton County, for the work and shall promptly make payments of all amounts due to all Claimants, then this obligation shall be void; otherwise to remain in full force, virtue, and effect. Claimant shall mean any subcontractor, material supplier or the person, firm, or corporation furnishing materials or equipment for or performing labor or services in the prosecution of the work provided in such an agreement, including lubricants, oil, gasoline, coal, and coke, repairs on machinery, and tools, whether consumed or used in connection with the construction of such work, and all insurance premiums on said work, and for all labor, performed in such work.

IT IS AGREED that no modifications, omissions, or additions in or to the terms of such contract or in or to the plans or specifications therefor shall affect the obligation of such sureties on this bond.

IN WITNESS WHEREOF, we hereto set our hands and seals:

< <BIDDER > >

(Payment Bond)

_____
(Signature)

_____
(Printed)

_____
(Title)

State of Indiana, County of,_____, SS:
Before me, the undersigned Notary Public, personally appeared;
_____ As Principal and acknowledged the execution of the above bond on this_____Day of_____, 20___.
My commission Expires:

_____
(County of Residence)_____(Notary Signature & Seal)

< <SURETY > >
(Payment Bond)

_____
(Signature)

_____
(Printed)

_____
(Title)

State of Indiana, County of,_____, SS:
Before me, the undersigned Notary Public, personally appeared;
_____ As Principal and acknowledged the execution of the above bond on this_____Day of_____, 20___.

My commission Expires: _____

_____
(County of Residence) (Notary Signature & Seal)

PERFORMANCE BOND

KNOWN BY ALL PERSONS BY THESE PRESENTS THAT THE UNDERSIGNED:

BIDDER____: _____

_____

as principal, and SURETY:

[Name] _____

[Address] _____

_____

as Surety,

are firmly bound unto Hamilton County, Indiana in the penal sum of an amount equal to ONE HUNDRED PERCENT of the amount of the Principal's bid, to the payment of which, well and truly made, we bind ourselves jointly and severally, and our joint and several heirs, executors, administrators and assigns, firmly by these presents.

THE CONDITIONS OF THE ABOVE OBLIGATIONS ARE SUCH THAT, whereas, the Principal is herewith submitting a bid and proposal for construction and completion of this contract in accordance with plans and specifications, which are made part of this bond;

NOW, THEREFORE, if Hamilton County shall award the Principal the contract for work and the Principal shall promptly enter into contract with Hamilton County, for the work and shall well and faithfully do and perform the same in all respects according to the plans and specifications and according to the time, terms, and conditions specified in this contract to be entered into, and in accordance with all requirements of law and shall promptly pay all debts incurred by the Principal or a subcontractor in the construction of the work, including labor, service, and materials furnished, and shall remain in effect at least until one year after the date when final payment becomes due, then this obligation shall be void; otherwise to remain in full force, virtue, and effect.

IT IS AGREED that no modifications, omissions, or additions in or to the terms of such contract or in or to the plans or specifications therefor shall affect the obligation of such sureties on this bond.

IN WITNESS WHEREOF, we hereto set our hands and seals:

< <BIDDER > >
(Performance Bond)

_____
(Signature)

_____
(Printed)

_____
(Title)

State of Indiana, County of,_____, SS:
Before me, the undersigned Notary Public, personally appeared;
_____ As Principal and acknowledged the execution of the above bond on this_____Day of_____, 20___.
My commission Expires: _____

_____
(County of Residence) (Notary Signature & Seal)

< <SURETY > >
(Performance Bond)

_____
(Signature)

_____
(Printed)

_____
(Title)

State of Indiana, County of,_____, SS:
Before me, the undersigned Notary Public, personally appeared;
_____ As Principal and acknowledged the execution of the above bond on this_____Day of _____, 20___.
My commission Expires: _____

_____
(County of Residence) (Notary Signature & Seal)

NON-COLLUSION AFFIDAVIT

STATE OF)
) SS
COUNTY OF)

The undersigned contractor, being duly sworn, on oath, says that he has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by it, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone, nor to prevent any person from bidding nor to induce anyone to refrain from bidding, and that this bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding in any way or manner whatever.

BY :_____
(Signature)

_____
(Title)

FOR :_____
(Firm or Corporation)

State of Indiana, County of,_____, SS:
Before me, the undersigned Notary Public, personally appeared;
_____ As Principal and acknowledged the execution of the above bond on this_____Day of _____, 20___.
My commission Expires: _____

_____
(County of Residence) (Notary Signature & Seal)

LEGAL STATUS OF BIDDER

This Proposal is submitted in the name of:

Firm Name_____

The undersigned hereby designates below his business address to which all notices, directions or other communications may be served or mailed:

Street :_____

City :_____

State :_____Zip Code:_____

The undersigned hereby declares that he has legal status checked below:

( ) INDIVIDUAL
( ) INDIVIDUAL DOING BUSINESS UNDER AN ASSUMED NAME
( ) CO-PARTNERSHIP (The Assumed name of the partnership is registered in the County of , Indiana.
( ) CORPORATION INCORPORATED UNDER THE LAWS OF THE STATE OF . The Corporation is:
( ) LICENSED TO DO BUSINESS IN INDIANA
( ) NOT NOW LICENSED TO DO BUSINESS IN INDIANA

The name, titles and home address of all persons who are officers or Partners in the organization are as follows:

NAME AND TITLE_____ HOME ADDRESS

_____

_____

_____

Signed and Sealed this_____day of _____. 20___.

By_____
(Signature)

_____
(Printed)

_____
(Title)

PROGRESS ESTIMATE
HAMILTON COUNTY
HIGHWAY DEPARTMENT

1700 South 10th Street
NOBLESVILLE, IN 46060
(317) 773 – 7770 Office
(317) 776 – 9814 Fax

PROJECT:

PROGRESS ESTIMATE NO

PARTIAL ☐ FINAL ☐

PAY NO.	ITEM	UNITS	UNIT PRICE	PLAN QUANTITY	QUANTITY THIS ESTIMATE	QUANTITY TO DATE	EXTENSION

CONTRACTOR :_____ TOTAL EARNINGS TO DATE :

BY :_____ DATE:_____ LESS RETAINED PERCENTAGE:

APPROVED BY :_____ DATE: _____ PREVIOUS AMOUNT :

APPROVED BY :_____ DATE:_____ AMOUNT DUE CONTRACTOR :

CHANGE ORDER

HCHD FORM 1063 REV 05-02-02

HAMILTON COUNTY HIGHWAY DEPARTMENT

Page: _____

CHANGE ORDER

Project No. _____ Contract No. _____

Project Description: _____ Change Order No. _____

Whereas, the Standard Specifications for this contract provides for such work to be performed, the following change is recommended. (Give location, description and reason)

ITEM NO.	DESCRIPTION OF ITEM	UNIT	UNIT PRICE	INCREASE		DECREASE		% CHANGE	
				QUANTITY	AMOUNT	QUANTITY	AMOUNT	THIS C.O.	TO DATE
	PLACE EW FOR EXTRA WORK ITEMS		TOTALS						
	PLACE FA FOR FORCE ACCOUNT ITEMS		NET	XXXXXXXX					
				XXXXXXXX	ESTIMATED COST		$		-

This contract has been extended / reduced (circle one) by 0 work / calendar (circle one) days or the completion has been moved to 0 to accommodate the changes made in this change order. It is the intent of the parties that this change order is full and complete compensation for the work described above. Notification and consent to this change in plans is hereby acknowledged.

Contractor : _____ By: _____ Date: _____

Submitted for Consideration

Project Engineer	Construction Engineer
County Engineer	Highway Director

Title: _____

AFFIDAVIT AND WAIVER OF LIEN

□ Final □ Partial □ Payment to Follow

State of Indiana, County of _____ SS
_____ Being duly sworn states that he is the_____of
_____(Name of Officer)_____(Title)
_____having contracted with_____to furnish
certain materials and/or labor as follows_____
_____(Description)
for the project known as _____

located at _____and owned by_____Hamilton County_____
_____(Owner)
and does hereby further state on behalf of the aforementioned subcontractor/supplier:_____
(PARTIAL WAIVER) that there is due from the CONTRACTOR the sum of_____
_____ Dollars ($)
_____( )___receipt of which is hereby acknowledged; or
( ) the payment of which has been promised as the sole consideration of this affidavit and Partial Waiver of Lien which is given solely with respect to said amount and which waiver shall be effective only upon receipt of payment thereof by the undersigned:
(FINAL WAIVER) that the final balance due from the CONTRACTOR is the sum of_____
_____Dollars ($)

_____(_____)_____receipt of which is hereby acknowledged or
( ) the payment of which has been promised as the sole consideration for the Affidavit and Final Waiver of Lien which shall become effective upon receipt of such payment

THEREFORE, the undersigned waives and releases unto the OWNER of said premises, any and all lien or claim whatsoever on the above-described property and improvements thereon on account of LABOR or material or both, furnished by the undersigned thereto, subject to limitations or conditions expressed herein, if any; and further certifies that no other party has any claim or right to a lien on account of any work performed or material furnished to the undersigned for said project, and within the scope of this affidavit and waiver.

_____By_____Title_____
(Firm) (Authorized Representative)
WITNESS MY HAND AND NOTARIAL SEAL this _____day of_____20____

_____
(Notary Public)

My Commission Expires_____
Printed
Residing in _____County,_____

CERTIFICATION LETTER

TO BE COMPLETED BY ALL SUB-CONTRACTORS AND MATERIAL SUPPLIERS

Reference:

REPLACEMENT PLAN FOR SMALL STRUCTURE 22013
EAST 196TH STREET OVER UNKNOWN STREAM
NOBLESVILLE TOWNSHIP
HAMILTON COUNTY, INDIANA

We hereby certify that we have examined the Contract Plans and Specifications for this project and that all materials and workmanship will be in strict compliance therewith.

_____
Company Name

_____
Address

_____

_____

By_____
(Signature)

_____
(Printed)

_____
(Title)

Date_____

Describe Item of work or material to be furnished:

EMPLOYMENT ELIGIBILITY VERIFICATION CERTIFICATION

This Certification is submitted by the undersigned, _____, as part of the contract with Hamilton County for the project known as _____ entered into on the _____ day of _____, 20__. The undersigned affirms under the penalties of perjury that the Contractor does not knowingly employ an unauthorized alien.

The Contractor shall enroll in and verify the work eligibility status of all newly hired employees through the E-Verify program as defined in IC 22-5-1.7-3. The Contractor is not required to participate if the Contractor is self-employed and does not employ any employees.

The Contractor shall not knowingly employ or contract with an unauthorized alien. The Contractor shall not retain an employee or contract with a person that the Contractor subsequently learns is an unauthorized alien.

The Contractor shall require all subcontractors who perform work under its contract, to certify to the Contractor that:

1. The subcontractor does not knowingly employ or contract with an unauthorized alien;
2. The subcontractor has enrolled and is participating in the E-Verify program. The Contractor agrees to maintain this certification at least two years after the term of a contract with a subcontractor.

The County may terminate the contract if the Contractor fails to cure a breach of this provision no later than thirty (30) days after being notified by the County.

The terms of this Certification shall be incorporated within the contract between the Contractor and the County.

Witness this _____ day of _____, 2021.

Contractor: _____

Address: _____

_____

Signature: _____, _____

Printed: _____ Title _____

GENERAL PROVISIONS INDEX

GENERAL PROVISIONS

GP1 CONTRACT QUESTIONS

Submit all questions in writing to Aaron Goslee at SJCA Inc. agoslee@sjcainc.com prior to 9:00 a.m. local time June 9, 2021. A written response will be faxed and mailed to the addresses on the Record of Plans Purchased that is required to be filled out by anyone purchasing plans. No questions will be answered by telephone.

GP2 PUBLIC OPENING OF BIDS

Proposals may be forwarded individually by registered mail or delivered in person, addressed to the Hamilton County Auditor, 33 North 9th Street, Suite L21, Noblesville, Indiana, 46060, until **12:30 p.m., June 14**, **2021**. After 12:30 p.m. they can be delivered to the Auditor in the Hamilton County Commissioners Courtroom up to the time of the noticed bid opening. Only proposals from those *CONTRACTOR*S who are registered on the Indiana Department of Transportation's current listing of Prequalified Contractors for item D(A) "Bridges: Highway Over Water" will be considered. Any bids submitted by *CONTRACTORS* not approved for this item on the list will be returned to the bidder unopened.

Bids will be opened publicly and read aloud at 1:45 p.m. local time, June 14, 2021 in the Hamilton County Government & Judicial Center in Noblesville, Indiana, Commissioner's Courtroom. Bidders, or their authorized agents, are invited to be present. Any Bids received after 1:45 p.m. local time, June 14, 2021 will be returned to the bidder unopened.

GP3 NOTIFICATION OF WORK SCHEDULE

The CONTRACTOR shall provide a listing of the next workday's work activities by 12:00 p.m. of that day's work for the ENGINEER'S scheduling and inspection. All work scheduled for Monday shall be provided on Friday of the preceding week.

Failure to provide such notice within the specified time may result in the failure of the ENGINEER to pay for any material placed that day.

GP4 WARRANTY OF WORK

The CONTRACTOR warrants and guarantees for **one year** after final acceptance of the contract, to the OWNER that all work will be performed, supplied, furnished and installed, and that the work will perform in strict accordance with the Contract Documents and will not be defective. Notice of all work determined or suspected to be defective or not in conformity with the Contract Documents shall be given to the CONTRACTOR within reasonable time after observance thereof.

GP5 EXAMINATION OF THE PROJECT SITE

Before the bid date, all bidders shall carefully and thoroughly examine the entire site of the proposed work, adjacent premises, various means of approach, access thereto by means of a site inspection visit, and make all necessary investigations to inform themselves thoroughly as to the facilities necessary for delivering, placing, and operating the necessary construction equipment, and for delivering and handling materials at the site, and shall inform themselves thoroughly as to any and all actual or potential

difficulties, hindrances, delays, and constraints involved in the commencement, prosecution and completion of the proposed work in accordance with the requirements of this contract. The CONTRACTOR, by the execution of the Contract, shall in no way be relieved of any obligation under it, due to his failure to receive or examine any form or legal instrument, or to visit the site and acquaint himself with the conditions there existing. The OWNER will be justified in rejecting any claim based on facts, which he should have noticed as a result thereof.

GP6 CONTRACT DOCUMENTS

The Indiana Department of Transportation, Standard Specifications dated 2020 together with most recently published Supplemental Specifications shall be used in conjunction with these Plans, Contract Forms, General Provision, Special Provisions, Modifications to the Specifications, Standard Sheets and any addenda which may be issued for this project.

It is the intent of these Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance therewith. Any work, materials or equipment that may reasonably be inferred will be supplied whether or not specifically called for.

Wherever reference is made to the Indiana Department of Transportation, Director, or Chief Highway Engineer, it shall be interpreted as the Board of County Commissioners of Hamilton County, Indiana.

GP7 CONTRACTOR

The Firm or Corporation with whom the OWNER has entered into the Construction Contract.

GP8 OWNER

The Board of County Commissioners of Hamilton County, Indiana

GP9 ENGINEER

Hamilton County Highway Engineer or its authorized representative.

GP10 COUNTY

County of Hamilton, State of Indiana.

GP11 PRE-QUALIFICATION AND BIDDING

Contractor shall meet all the requirements setout in Section 102.00. Only bids from those CONTRACTORS who are currently registered on the Indiana Department of Transportation's listing of Prequalified Contractors for items D(A) "Bridges: Highway Over Water" will be considered. Any bids submitted by CONTRACTORS not on this list will be returned to the bidder unopened.

GP12 AWARD OF CONTRACT

The OWNER reserves the right to reject any or all bids or to waive any informalities and to accept the bid, which it deems favorable to the interest of the OWNER after all bids have been examined and scrutinized.

GP13 PROOF OF INSURANCE

CONTRACTOR shall not commence work until he has obtained all insurance specified herein, has filed with the OWNER one (1) copy of Certificate of insurance, and such insurance has been approved by the OWNER.

Should any coverage approach expiration during the Contract period, it shall be renewed prior to its expiration, and certificate again filed with the OWNER. If any of such policies are canceled or are changed so as to reduce the coverage evidenced by the Certificate, at least ten (10) days prior written notice by registered mail of such cancellation or change shall be sent to the OWNER.

All insurance provided for under this Section shall be written by Insurance Companies licensed to do business in Indiana and countersigned by registered Indiana agent. The insurance company shall file with the OWNER, one (1) copy of Affirmation of Authority, on the form furnished by the OWNER, as verification of the resident agent.

All insurance shall be maintained in full force and effect until the Contract has been fully and completely performed.

GP14 ADDITIONAL INSURED

Contractor shall submit Certificate of Insurance indicating the above necessary coverage as well as naming OWNER, its employees and representatives and ENGINEER as Additional Insured on all policies except Worker's Compensation.

GP15 INSURANCE

The Standard + Pollution Certificate of Liability Insurance shall be required for this Contract. Hamilton County's insurance requirements and example insurance documents can be found at: https://www.hamiltoncounty.in.gov/1645/Certificates-Of-Insurance.

GP16 INSPECTION OF WORK

The ENGINEER and his representatives shall at all times have access to the work wherever it is in preparation or in progress.

If the specifications, the ENGINEER's instructions, laws, ordinances or any public authority requires any work to be specially tested or approved, the CONTRACTOR shall give the ENGINEER timely notice of its readiness for inspection and, if the inspection is by an authority other than the ENGINEER, the date fixed for such inspection. If any work should be covered up without the approval or consent of the ENGINEER, it must, if required by the ENGINEER, be uncovered for examination at the CONTRACTOR'S expense.

GP17 STANDARDS OF QUALITY

All materials and equipment shall be of good quality and new, except as otherwise provided in the Contract Documents. All warranties and guarantees specifically called for in the Contract Documents shall expressly run for the benefit of the OWNER. If requested by the ENGINEER, the CONTRACTOR shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

GP18 UTILITIES

The CONTRACTOR shall be responsible for contacting and coordinating with all utilities affected by this project. Contract time will be charged unless the CONTRACTOR can show written evidence that he is making every possible effort on his part to get the utility work completed.

GP19 PROGRESS SCHEDULE

Within ten days after the date of the Notice to Proceed, the CONTRACTOR shall submit to the ENGINEER for review a proposed schedule indicating the starting and completion dates of the various stages of the work to be performed under this contract. The ENGINEER shall review the proposed schedule to determine conformity with the contract and will make recommendations to the OWNER concerning approval thereof; however the review, approval or other action taken by the ENGINEER or OWNER in respect of such schedules shall not relieve the CONTRACTOR of its obligations to perform the work within the contract schedule(s).

GP20 SUPERVISION

The CONTRACTOR shall supervise and direct the work completely and efficiently devoting such attention thereto and applying such skills and expertise as may be necessary to perform the work in accordance with the Contract Documents.

GP21 RESIDENT SUPERINTENDENT

The CONTRACTOR shall keep on the work site at all times during its progress, a competent resident superintendent, who shall not be replaced without written notice to the ENGINEER except under extraordinary circumstances. The superintendent will be the CONTRACTOR's representative at the site and shall have authority to act on behalf of the CONTRACTOR. All communications given to the superintendent shall be as binding as if given to the CONTRACTOR.

GP22 PERMITS

All permits and licenses which may be required due to construction methods such as, but not limited to, borrow or disposal pits, steam crossings, causeways, work bridges, cofferdams, etc., but which are not part of the contract documents shall be procured by the CONTRACTOR prior to beginning the work which requires the permit.

All charges, fees, and taxes shall be paid, and all notices necessary and incidental to the due and lawful prosecution of the work shall be given.

GP23 TRAFFIC CONTROL FOR CONSTRUCTION AND MAINTENANCE OPERATION

This work shall consist of furnishing, installing, and maintaining signs, barricades, temporary traffic control devices or adjustments, labor, materials, etc., necessary for the maintenance of traffic as called for within the Contract Documents, or as permitted by the ENGINEER and not specifically called out in the Itemized Proposal or specified within the Contract Documents as to the manner of payment, shall be included in the Lump Sum price for maintaining traffic as described within the Contract Documents and the applicable provisions of the Section 104.04 and 105.13 and as set out in the Itemized Proposal.

Construction Warning Lights, Type "A" shall be placed on all barricades and Road Construction Ahead signs as per Section 801.14.

PRIOR TO CLOSING ROADS TO TRAFFIC

This work shall consist of CONTRACTOR notifying U.S. Post Office, affected schools, and all Emergency Response Agency's, which shall include but not limited to County Sheriff's, Local Police, and Hospitals, of the road closure. A list containing all notified agencies shall be furnished to the ENGINEER within 24 hours of the notification to these agencies. Road Closure signs (XG20-5) shall be in placed minimum of two weeks prior to the actual road closure or unless specifically stated in contract document. It shall be CONTRACTOR responsibility to notify the ENGINEER in writing of road closure minimum of three weeks in advance for its approval.

AFTER OPENING ROADS TO TRAFFIC

This work shall consist of Contractor notifying U.S. Post Office, affected schools, and all Emergency Response Agency's, which shall include but not limited to County Sheriff's, Local Police, and Hospitals, of the road opening. A list containing all notified agencies shall be furnished to the ENGINEER within 24 hours of the notification to these agencies. At any time, CONTRACTOR fails to open the roads or specific roads within the specified time frame as setout in the Contract Documents. Then CONTRACTOR shall pay liquidated damages as set forth elsewhere herein.

This cost shall include all labor, material, equipment, and supervision necessary to maintain Road Closure and Traffic Control for Construction and Maintenance Operation shall be included in the pay item identified as "Maintenance of Traffic", LSUM.

GP24 PARTIAL PAYMENTS

Partial payments will be made once each month as the work progresses. Said payments will be based upon estimates prepared by the CONTRACTOR using the provided HCHD FORM 8049 and a County Claim Voucher and approved by the ENGINEER for the value of the work performed and materials complete in place in accordance with the contract, plans and specification. No partial payment will be made when the amount due the CONTRACTOR since the last estimate amounts to less than Five Hundred Dollars. From the total of the amount determined to be payable on a partial payment, ten percent of such total amount will be deducted and retained by the County until the final completion and acceptance of the work.

GP25 FINAL PAYMENT

When the contract work has been completed in an acceptable manner in accordance with the terms of the contract, the CONTRACTOR will prepare a final estimate for the work and will furnish the ENGINEER with a copy thereof. Before final payment of the contract, the CONTRACTOR shall furnish the provided Affidavit and Waiver of Lien from all subcontractors, material suppliers and equipment suppliers who provided goods and/or services valued at $500.00 or greater. Final payment will not be made until a final inspection has been made, the work has been accepted by the County and has met the requirements of Section 109.08 of the Indiana Department of Transportation Standard Specifications. The ENGINEER, acting for the Board of County Commissioners, will then certify to the County Auditor the balance due the CONTRACTOR, and said certificate will be deemed an acceptance of the completed contract by the OWNER.

SPECIAL PROVISIONS INDEX

SPECIAL PROVISIONS

SP1 CONTRACT TIME

The schedule for the completion of the work included in this contract including incidentals and clean up, shall be governed on a Calendar Day Basis.

The number of Work Days allowed for completion of this Contract shall be 120 Calendar Days after Notice to Proceed.

SP2 ROAD CLOSURE

The CONTRACTOR shall limit the time that the road is closed to traffic to a maximum of 60 calendar days without written approval of an extension to this time from the OWNER.

The CONTRACTOR shall provide the OWNER at least three weeks notice prior to closing the road. In no case shall the road be closed without prior consent from the OWNER.

SP3 PRIOR TO CLOSING ROADS TO TRAFFIC

The CONTRACTOR is to notify U.S. Post Office, rural fire departments, affected schools, local police agencies and Hamilton County Sheriff's Department, copy to ENGINEER. The XG20-5 Closure Signs are to be in place a minimum of two weeks prior to the actual closure.

SP4 AFTER OPENING ROADS TO TRAFFIC

The CONTRACTOR is to notify the U.S. Post Office, rural fire departments, affected schools, local police agencies and Hamilton County Sheriff's Department, copy to ENGINEER.

SP5 HOLIDAYS THAT WORK IS NOT PERMITTED

The CONTRACTOR may not perform work on this project as mentioned in the most recent INDOT Standard Specifications and including on the following days:

- All Saturday
- All Sunday

At the discretion of the ENGINEER, CONTRACTOR shall be allowed to work on Saturday and Sunday, only if, CONTRACTOR submits in writing 72-hours in advance to the ENGINEER or specifically stated in the contract documents mentioned elsewhere herein.

SP6 NOTICE TO PROCEED

The CONTRACTOR shall start to perform the work on July 1, 2021 as written in the Notice to Proceed, but no work shall be done at the site prior to the date of the Notice to Proceed.

SP7 EXISTING CONDITIONS

The CONTRACTOR shall verify the elevation and measurements of all points where new construction is to match existing conditions prior to the commencement of any construction activities.

Where new work is to be filled to old work, the CONTRACTOR shall check all dimensions and condition in the field and report any errors or discrepancies to the ENGINEER or assume responsibility for their correctness and the fit of new parts to old. If such parts do not fit properly, CONTRACTOR shall make at CONTRACTOR'S expense such alternations to new parts as may be necessary to assure proper fits and connection, which meet the approval of the ENGINEER.

No direct payment shall be made for this work but the cost thereof shall be included in the costs of other items of the contract.

SP8 DISPOSAL OF EXCESS MATERIAL

All excess material not to be salvaged (waste) shall be removed from the project site. Whether a private or public waste site is utilized, such disposal shall comply with all Federal, State and local ordinances and permit requirements.

No direct payment will be made for this work but the cost thereof shall be included in the costs of the other items of the contract.

SP9 TESTING OF MATERIALS

The CONTRACTOR shall be responsible for all testing and sampling of materials as hereinafter specified. The CONTRACTOR shall furnish certified tests for the following materials, which are to be made by an independent laboratory approved by the ENGINEER. The independent laboratory shall submit copies of all test results directly to the ENGINEER. Testing performed by an agent of a material producer or supplier will not be considered independent. The cost of providing samples and testing will not be paid for directly, but will be included in the cost of other items.

BITUMINOUS MATERIAL

The Contractor shall provide proof that all bituminous material used shall be of State tested material and on immediate usage basis. Class D certification required.

BORROW

The CONTRACTOR shall determine the location of the borrow pit and shall have laboratory density tests made as prescribed in Section 203.24 and outlined in AASHTO T-99. The subgrade shall be constructed in accordance with Section 207. No direct payment will be made for subgrade treatment. The cost of all work and testing for subgrade treatment shall be included in other items of the contract. Frequency of the density testing shall be every 100 ft for each lane of pavement per lift. Density testing for shoulder width greater than 6 feet shall be every 300 feet per lift.

FOUNDATION

The CONTRACTOR shall verify soil bearing capacity meet or exceed the design capacity at each wingwall and main footing. Engineer shall determine the location of each test.

SP10 GEOTECHNICAL INVESTIGATION

A Geotechnical investigation for this project site has been performed by Earth Exploration, Indianapolis, Indiana. This report presents the soil evaluation, Geotechnical recommendations and construction considerations for this project.

A copy of this report in part is included in the Attachments.

SP11 UTILITY INFORMATION

All applicable sections for 105.06 and 107.20 shall apply except as amended elsewhere within the contract documents and as follows:

The utilities are beyond the control of the OWNER. Coordination with any applicable utility(s) is the sole responsibility of the CONTRACTOR.

The following is provided for information only. The status of all utility companies and organizations potentially involved with the work to be performed are described below as known at the time this contract was prepared. The active engagement of the Utility Coordinator does not minimize nor negate the responsibility of the CONTRACTOR to perform duties per the Standard Specifications. The CONTRACTOR shall contact the following personnel or companies to coordinate his work prior to the commencement of any construction activities:

The facilities of AT & T exist within the project limits, per the signed work plan provided by the utility. AT & T Distribution will relocate underground fiber and copper cable to a location 3' off the north proposed right of way. The existing AT & T Distribution aerial lines and poles at STA 13+90 and STA 15+60 on the north side of 196th Street will be removed. If questions arise, Brad Bailey. of the utility may be contacted at 317-610-5422 or at bb3525@att.com. The work plan was executed on November 6, 2020.

The facilities of Comcast exist within the project limits, per the signed work plan provided by the utility. Comcast will relocate their UG facilities to the south side of 196th Street at an approximate depth of 10' below proposed grade. The existing Comcast Cable underground facilities along the north side of 196th Street will be retired in place. If questions arise, Scott Evans of the utility may be contacted at 317-516-2237 or at sevans@telecomplacement.com. The work plan was executed on December 3, 2020.

The facilities of Duke Energy – Distribution exist within the project limits, per the signed work plan by the utility. Pole 189-023 will be relocated approximately 97' west of its existing position in line with the existing OH line, a 25' double downguy will be installed along the south side of 196th Street. Pole 189-022 will be relocated 32' east of its existing position, in line with the existing overhead line, 25' double downguy will be installed along the south side of 196th Street. Install 58' of aerial 1 phase line crossing 196th Street to an existing pole located on the north side of 196th Street. The overhead lines between poles 189-022 and 189-023 will be removed and replaced by an underground 3 phase conductor running along the proposed south 196th Street right of way (1' to 3' off) at a minimum depth of 5'. Duke Energy Distribution will remove 80' of 1 phase line crossing over 196th Street. If questions arise Luis Alvarez of the utility may be contacted at 765-454-6169 or at luis.alvarez@duke-energy.com. The work plan was executed on November 24, 2020.

The facilities of Duke Energy – Transmission do not exist within the project limits, per the signed work plan by the utility. If questions arise Dwayne Wright of the utility may be contacted at 317-838-2044 or at dwayne.wright@duke-energy.com. The work plan was executed on January 23, 2020.

The facilities of Indiana American Water do not exist within the project limits, per the signed work plan provided by the utility. If questions arise, Amrit Singh of the utility may be contacted at 317-807-2469 or at amrit.singh@amwater.com. The work plan was executed on August 4, 2019.

The facilities of City of Noblesville do not exist within the project limits, per the signed work plan provided by the utility. If questions arise, Kirk Staley of the utility may be contacted at 317-776-6353 or at kstaley@noblesville.in.us. The work plan was executed on August 28, 2019.

The facilities of Vectren Gas Distribution do not exist within the project limits, per the signed work plan provided by the utility. If questions arise, Shawn Williams of the utility may be contacted at 317-776-5574 or at shawn.williams@centerpointenergy.com. The work plan was executed on July 19, 2019.

The facilities of Vectren Gas Transmission do not exist within the project limits, per the signed work plan provided by the utility. If questions arise, Jeff Donnelly of the utility may be contacted at 812-491-5558 or at jeff.donnelly@centerpointenergy.com. The work plan was executed on August 15, 2019.

SP12 PRE-CONSTRUCTION CONFERENCE

Before the CONTRACTOR is issued a Notice to Proceed, a conference attended by the OWNER, ENGINEER, CONTRACTOR and others as appropriate will be held. The purpose of this conference will be to discuss procedures for making submittals, processing applications for payment, and to establish other procedures and understandings bearing upon coordination and performance of the work.

- Contractor shall submit the following documents at the Pre-construction Conference:
- Payment Bond as mentioned elsewhere herein
- Performance Bond as mentioned elsewhere herein
- Certification Letter as mentioned elsewhere herein
- Certificate of Insurance as mentioned elsewhere herein
- Specific Mix Design, Certification, and specification of material required to be submitted as mentioned elsewhere herein

CONTRACTOR shall not be allowed to proceed with any work until all the above-mentioned documents are submitted to the ENGINEER. Notice to proceed shall be issued as mentioned elsewhere herein and all work / calendars days shall be counted after issuance of Notice to Proceed. This time frame also includes review and approval of any mix design and certification required as mention elsewhere herein. ENGINEER shall have minimum of 72-hours for review and approval of any mix design submitted.

SP13 DETERMINATION AND EXTENSION OF CONTRACT TIME

An extended date of completion will only be considered if the notice to proceed is not issued within 90 days of the letting except if the delay is due to the failure of the CONTRACTOR to furnish any stated or requested forms or information.

SP14 LIQUIDATED DAMAGES

Damages setout below are not meant to penalize the contractor, but to insure timely completion of this contract. It is the sole responsibility of the CONTRACTOR to thoroughly familiarize himself with these

contract documents.

The CONTRACTOR shall pay One Thousand dollars ($1,000.00) for each calendar day after the permitted contract time has expired as setout elsewhere herein for failure to complete the work in accordance with this contract.

The CONTRACTOR shall also pay One Thousand dollars ($1,000.00) for each calendar day after the permitted 60 calendar days that the road is closed to traffic.

The CONTRACTOR shall pay One Thousand dollars ($1,000.00) for each calendar /or portion thereof for failure to complete specific time sensitive operation, mentioned elsewhere herein, within the time frame allowed.

If the CONTRACTOR exceeds any or all allotted time periods simultaneously, the assessed damages will be cumulative.

SP15 DELETION OF WORK

The OWNER/ENGINEER has the right to delete any items that are a part of this contract.

SP16 CLEARING RIGHT-OF-WAY

Clearing Right-of-Way shall be in accordance with the requirements of Section 201 except as follows: The initial payment for clearing right-of-way will be limited to 3 percent of the original total bid. If the contract lump sum price for clearing right-of-way is greater than 3 percent of the original total bid, the amount over 3 percent will not be paid until the contract has been completed and accepted.

Trees, brush, and other obstructions shall be cleared from right-of-way to right-of-way and in accordance with Section 201, subject to any notes on the plans that identify specific trees or areas to remain undisturbed. The cost of tree and stump removal will not be paid for but shall be included in the lump sum price for "Clearing Right-of-Way."

This item includes the removal of all existing pipes, box culverts, and all other drainage structures in accordance with Section 202, to be removed during this project.

SP17 PROTECTION OF FIELD TILE

All field tiles encountered and affected by the scope of work specified within the contract documents shall be given a positive outlet. Any tile outside the construction limits damaged by the CONTRACTOR's operations shall be replaced by the CONTRACTOR at his own expense.

SP18 EXCAVATION, DRIVEWAY

Excavation and/or borrow required for driveway construction shall be included in the cost of other items.

SP19 EMBANKMENT OVER EXISTING ROADBEDS

Placement of new embankment over the existing roadbed shall not be permitted. The existing

pavement shall be removed entirely, or milled full-depth, spread and re-compacted prior to any fill being placed in the roadbed. The cost of removal of the existing pavement is included in the pay item "Excavation, Common".

SP20 PREPARATION OF EXISTING ROADWAYS

The CONTRACTOR shall clip the edges of the existing pavement prior to resurface as directed by the ENGINEER. After clipping, all debris shall be disposed of off site. If vegetation exists in cracks within the area to be paved, spraying of weed killer is required prior to resurface. Power sweep the road section immediately prior to resurface. Any debris, which does not come off the pavement by sweeping, shall be hand cleaned. All roads shall be strung. The cost of this work shall be included in the other items in the contract.

SP21 HMA, TYPE B

This work shall consist of constructing a Surface, Intermediate, and Base course of hot mix asphalt in a central plant and spread and compacted on a prepared surface. The mixture shall be specified as HMA Type B, Surface, HMA Type B Intermediate, and HMA Type B, Base in accordance with INDOT Section 402.04 except as follows:

RECYCLED MATERIAL: The CONTRACTOR may not use any recycled materials in the surface mixture.

Acceptance shall be based on Section 402.09 and CONTRACTOR shall furnish Class "D" certification.

TEMPERATURE REQUIREMENTS: Per INDOT Standard Specifications.

SP22 SEEDING AND SODDING

If the seeding is placed outside the seasonal limitation requirement per INDOT Specification, then warranty Bond shall include all operations necessary for re-installation, including re-installation of erosion control blankets as specified on the plans.

SP23 SEEDING OUTSIDE CONSTRUCTION LIMITS

Areas which have been disturbed by construction and are outside the construction limits shall be seeded with Mulched Seeding, R in accordance with 621.06(a), or as directed.

No payment will be made for seeding required in areas outside the construction limits, which have been disturbed by construction.

SP24 DETOUR ROUTE MARKER ASSEMBLY

This work shall consist of installation of Detour Route Marker Assembly, as indicated in the detail drawing, and in accordance with Section 801.05 of the Standard Specification.

CONTRACTOR shall be required to post detour sign (XM4-8), arrow marker (M6-1S), and other necessary marker required or directed by the ENGINEER. All labor, material, equipment, maintenance, and supervision required to complete this work shall be included in the pay item identified as "Detour

Route Marker Assembly", EACH.

SP25 ROAD CLOSURE SIGN ASSEMBLY

This work shall consist of installation of Road Closure Sign Assembly shall be used with Type B Barricades and Type A Warning Lights, as indicated in the detail drawing and in accordance with Section 801.06, 801.07, and 801.14 of the Standard Specification.

All labor, material, equipment, maintenance, and supervision required to complete this work shall be included in the pay item identified as "Road Closure Sign Assembly", EACH.

SP26 SURVEYOR MARKER

Before the marker is disturbed, the Hamilton County Surveyor's Office shall be notified seven (7) calendar days in advance in writing. Any marker disturbed or covered without the notification of the Hamilton County Surveyor's Office or without the Engineer's approval shall be repaired/reset at the contractor's expense.

ATTACHMENTS

Geotechnical Report

Utility Work Plans

GEOTECHNICAL EVALUATION

196TH STREET OVER UNKNOWN STREAM
STRUCTURE NO.: HAMILTON 22013
HAMILTON COUNTY, INDIANA

Prepared for

SJCA P.C.
9102 NORTH MERIDIAN STREET, SUITE 200
INDIANAPOLIS, INDIANA 46260

By

EARTH EXPLORATION,
A TERRACON COMPANY
7770 WEST NEW YORK STREET
INDIANAPOLIS, INDIANA 46214-2988

October 21, 2020

October 21, 2020

Mr. Harry Fox, P.E.
SJCA P.C.
9102 North Meridian Street, Suite 200
Indianapolis, IN 46260

EARTH EXPLORATION INC.
A Terracon COMPANY
7770 West New York Street
Indianapolis, IN 46214
(317) 273 1690
(317) 273 2250 (FAX)

Re: Geotechnical Evaluation
196th Street over Unknown Stream
Structure No.: Hamilton 22013
Hamilton County, Indiana
EEI Project No. CJ195271

Dear Harry:

We have completed our geotechnical evaluation for the referenced project. This report presents the results of our subsurface exploratory program and provides geotechnical recommendations for the proposed improvements.

The opinions and recommendations herein are based, in part, on our interpretation of the subsurface information at the exploratory locations as indicated on the attached Exploratory Location Plan (Drawing No. CJ195271.B1). This report does not reflect variations in subsurface conditions between or beyond these locations. Variations in these conditions should be expected, and fluctuation of the groundwater levels will occur with time. Other important limitations of a geotechnical report are discussed in Appendix A.

PROJECT DESCRIPTION

We understand that the Commissioners of Hamilton County are planning to replace an existing small structure carrying 196th Street over an unknown stream (Structure No. Hamilton 22013), using local funds only. Based on the preliminary plans provided by SJCA P.C. (SJCA), the new structure is anticipated to consist of a box culvert with a 5-ft rise and a 10-ft span. The invert and the bottom of the structure are planned near El. 786 and 785, respectively. The flowline of the stream is anticipated near El. 786. Note that wingwalls are not anticipated on either end of the structure. The proposed structure is planned near Sta. 15+07, Line “A”. The project begins and ends at Stations 14+50 and 15+60 (along Line “A”), respectively, for a total project length of about 110 ft. Roadway improvements consisting of road widening, mill and overlay of the existing pavement between Sta. 14+50 and 14+95, and full depth pavement replacement in the remaining area is planned within the above-mentioned project limits. Additionally, incidental construction consisting of road widening and resurfacing the existing pavement is planned for an additional 140 to 150 ft in each direction. Maintenance of traffic (MOT) is planned to be a road closure.

Earthwork is expected to establish the grades in the areas of full depth pavement replacement since the areas to receive new pavement components are already near grade. The maximum earth fill and cut required to establish the proposed embankment and accommodate road widening is 6 and 2 ft, respectively. Sideslopes are generally planned to be 3H:1V and flatter.

Additional information such as construction schedule is not known. In the event that the nature, design or location of the proposed construction changes, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed, and the conclusions are modified or confirmed in writing.

FIELD EXPLORATION AND LABORATORY TESTING

The subsurface conditions for the proposed improvements were explored by performing two culvert borings (designated CB-1 and CB-2) to a depth of about 40 ft each and two road borings (designated RB-1 and RB-2) to a depth of about 10 ft each. Pavement cores (designated PC-1 and PC-2) were also obtained at the road boring locations. Hand auger soundings (designated HAS-1 through HAS-4) were performed in the stream at both ends of the existing structure and in the areas of proposed embankment fill. The number, location and depths of the exploratory elements were determined by Earth Exploration, Inc., A Terracon Company (EEI). The borings were located in the field by EEI personnel referencing existing site features, and ground surface elevations at the test boring locations were interpolated to the nearest 1 foot based on topographic information provided on the preliminary plans. The exploratory locations and elevations should be considered accurate only to the degree implied by the methods used.

Test borings were performed using hollow stem augers to advance the boreholes. Representative samples of the soil conditions using Standard Penetration Test (SPT) procedures (AASHTO T 206) were obtained at predetermined intervals. Boreholes were backfilled with auger cuttings and a bentonite chip plug, and a concrete patch was placed at the road surface. Additional details of the drilling and sampling procedures are provided in Appendix B.

Following the field activities, the soil samples and pavement cores were visually classified by an EEI engineering technician and later reviewed by an EEI geotechnical engineer. After visual classification of the soil, representative samples were selected and submitted for index and strength property testing. These tests included: natural moisture content; Atterberg limits; unconfined compression; unit dry density; and several hand penetrometer readings. The results of these tests are provided on the boring logs in Appendix C and/or respective laboratory reports in Appendix D. For your information, soil descriptions on the boring logs are in general accordance with the INDOT Standard Specifications (ISS[1]) (textural classification, e.g., clay loam). The boring logs represent our interpretation of the individual samples and field logs and results

[1]References the Indiana Department of Transportation (INDOT) Standard Specifications.

of the laboratory tests. The stratification lines on the boring logs represent the approximate boundary between soil types; although, the transition may be gradual.

SITE CONDITIONS

Surface Conditions

The surface conditions at the boring locations consisted of about 7 to 12 in. of asphaltic concrete. Granular subbase consisting of 5 in. of crushed stone was observed below the asphaltic concrete at the road boring locations. Refer to the attached Pavement Core Logs and Summary of Pavement Cores for additional details.

The hand auger soundings performed in the existing stream and in the areas of proposed embankment fill exposed up to 6 in. of topsoil and were underlain by soft to medium stiff cohesive soils (i.e., clay loam). The moisture contents of these soils were observed to be in the range of 20 to 27 percent. Refer to Summary of Hand Auger Soundings provided in Appendix C.

Soil Conditions

Based on the information gathered during our field activities, the subsurface profile at the boring locations consisted of both cohesive and granular soils. Cohesive soils (i.e., clay loam and loam) were generally observed to the maximum depth explored (i.e., 10 ft) at the road borings and to a depth of 17 ft (i.e., El. 773) at the culvert borings. Note that a layer of granular soil (i.e., gravelly sand) was observed to a depth of 3 ft below the ground surface at Boring RB-2. The cohesive soils at the culvert borings were underlain by wet granular soils (i.e., sand) to a depth of about 39 ft. A layer of loam was observed between 39 and 40 ft. It should be noted that the fill observed at the boring locations is likely related to the fill placed as a part of the construction of the existing road and the structure.

From our observations, the consistency of the cohesive soils was typically stiff to hard based on hand penetrometer readings generally greater than 1 tons/sq ft (tsf). Note that soft and medium stiff layers were also observed at isolated locations. The moisture contents of the clay loam observed within 11 ft of the ground surface were typically in the range of 18 to 26 percent. The moisture contents of the loam were typically in the range of 8 to 13 percent. For your information, the moisture content is directly related to the shear strength characteristics of cohesive soils, i.e., as the moisture content increases for a given soil type, the strength decreases.

The clay loam observed within 11 ft of the ground surface at Borings CB-1 and RB-2 is of medium plasticity based on the plasticity indices (PI) in the range 13 to 19 and liquid limits (LL) in the range of 29 to 33 percent. The loam observed below the pavement and near a depth of 10 ft at Borings RB-1 and CB-2 is of slight plasticity based on PIs in the range of 7 to 9 and LLs in the range of 21 to 23 percent. The results of the unconfined compression tests performed on split-spoon samples of the loam observed between El. 778 and 783 indicated undrained shear

strengths (using a Ø = 0 concept) in the range of approximately 7 to 8 kips/sq ft (ksf). The unit dry densities of the loam were observed to be in the range of 120 to 133 lbs/cu ft (pcf).

The relative density of the granular soils was generally loose to medium dense based on the SPT N-values.

Groundwater Conditions

Groundwater level observations were made during and upon completion of the exploratory activities. Groundwater was observed during drilling near a depth of 23 to 24 ft (El. 769 to 770). Note that the flowline of the stream is anticipated to be near El. 786. As additional input, review of the *Soil Survey of Hamilton County* indicates seasonal groundwater to be within 1 ft of the existing ground surface. It should be recognized that groundwater levels of any kind will fluctuate due to changes in precipitation, infiltration, level of water in the stream, surface run-off, and other hydrogeological factors.

DISCUSSION AND RECOMMENDATIONS

Based on our observations at the test boring locations, the subsurface conditions are conducive for support of the structure, as planned, provided the subgrade is prepared as discussed herein. It should be noted that mill and overlay of the existing pavement is planned on the west side of the structure between Sta. 14+50 and 14+95. Given the depth and skewed geometry of the structure located near Sta. 15+07, we anticipate that the backfill for the structure will extend a few feet west of Sta. 14+95 where mill and overlay is planned. As such, consideration should be given to full depth pavement replacement where structure backfill is anticipated to extend on the west side. Additional discussion and recommendations related to design and construction are provided in the paragraphs below.

Earthwork

We recommend that the existing pavement components, wet or soft near-surface soils, topsoil, and soils containing organic matter (if any) be removed and utilities in conflict with the proposed construction be appropriately abandoned or relocated. We recommend that these removal activities be in accordance with Section 201 of the ISS. Where root masses are removed, we recommend that the area be regraded immediately to reduce the risk of soft/loose areas developing due to loosely placed fill or ponding water. It should be mentioned that scalping, as defined in 201.04 of the ISS, includes removal of surficial materials to a depth of 4 in. The topsoil observed at the hand auger soundings was generally 6 in. in thickness. Due to the potential of high variance in topsoil thickness (specifically due to neighboring agricultural fields), we recommend conservative quantities for topsoil removal be included in the contract. Where utilities (if any) are relocated, or abandoned, we recommend that the resulting excavations be backfilled with "B" Borrow and compacted to 100 percent of the standard Proctor density (AASHTO T 99).

After the surficial soil and pavement materials have been removed, we anticipate the subsurface conditions at the toe of the embankment and in the areas of new pavement components to generally consist of soft to stiff cohesive soils or medium dense granular soils. Once the subgrade is exposed, we recommend that the cohesive soils be proofrolled in accordance with the ISS 203.26. The purpose of proofrolling is to provide a first-order evaluation of how the subgrade is anticipated to react to construction traffic and gain an additional understanding of the conditions for support of the planned improvements. If proofrolling is not feasible, other means of subgrade evaluation (i.e., dynamic cone penetrometer) should be used. In order to reduce yielding conditions and reduce the risk of otherwise relatively firm cohesive subgrades from deteriorating when exposed to water and repeated construction traffic, consideration should be given to the timing of the removal of the existing pavement relative to preparation of the subgrade, precipitation and sequencing of other activities. We recommend that the existing pavement be used as a means of transportation for construction traffic during the embankment fill placement and replacement of the structure, if practical.

Based on our review of the boring logs and hand auger soundings, the majority of the exposed soils are anticipated to consist of soft to stiff medium plasticity cohesive soils. The LLs were in the range of 23 to 33 percent and PIs were in the range of 9 to 19 percent. The moisture contents at the pavement subgrade were typically in the range of 12 to 23 percent, and the moisture contents at the embankment fill subgrade were in the range of 20 to 27 percent.

Based on the subsurface conditions described above, we anticipate that soft yielding soils will be observed at some locations near the subgrade during construction. Note that yielding conditions will also depend on the time of the year the construction take place. We recommend that the construction take place during the dryer periods of the year in order to reduce the risk of widespread yielding. In the areas of the embankment fill, where soft/yielding conditions are observed, we recommend that improvement consist of removal to a maximum depth of 12 in. and replacement with B-Borrow to achieve a stable base. The B-Borrow should be compacted to 95 percent of the standard Proctor density (AASHTO T 99). The final decision regarding the depths of undercuts should be made at the time of construction based on the conditions encountered. For your estimating purposes, we recommend the quantities for foundation soil improvements (undercut to a depth of 12 in. and replacement with B-Borrow), as discussed, equal to the 40 percent of the subgrade area between the existing and proposed toe of the embankment be included in the contract. In the areas where new pavement components are to be placed, we are of the opinion that the recommended subgrade treatment will be sufficient to address the subgrade conditions.

Where granular soils are exposed (e.g., near Boring RB-2), we recommend that they be compacted in place via several passes of a smooth-drummed roller prior to placement of fill and/or pavement components.

Embankment Fill Placement and Compaction

As mentioned earlier, sideslopes are planned to be 3H:1V and flatter. The maximum earth fill and cut required to establish these slopes is 6 and 2 ft, respectively. Standard embankment construction practices outlined in the ISS should provide an adequate subgrade for embankment construction provided the subgrade is prepared as discussed above. We recommend that the fill used to raise grades be placed in loose lift thicknesses not exceeding 8 in. and be compacted to 95 percent of the maximum density obtained in accordance with AASHTO as specified in the ISS. In addition, benches should be cut into any existing slopes steeper than 4H:1V before fill placement so as to key the new fill into the slope. In our opinion, benches having a minimum width of 10 ft should be cut into the slope before new fill is placed. Where 10-ft wide benches are not feasible due to shallow embankment heights and/or granular conditions, 6-ft wide benches (i.e., minimum) are recommended.

Based on our review of the plans, we anticipate imported granular soils will be required to construct the embankment. The quality and the source of the imported soil will be evaluated by others on the field. If in-situ cohesive soils are re-used as fill, processing via continuous discing and drying (by aeration or chemical treatment) will be required before the placement. Provided the subgrade is prepared as discussed herein and given the relatively small embankment heights, we do not have concerns with regard to global instability for the slopes as planned.

Pavement Considerations

Based on our observations, the existing roadway subgrade consists of soft to stiff moderate plasticity cohesive soils. Given the short length of the project, resilient modulus testing was not performed. Additionally, majority of the portion of the roadway subgrade for the new pavement will consist of structure backfill or embankment fill for road widening. We recommend that the information in the table below be considered for pavement design.

Table 1: Soil Parameters for Pavement Design

Resilient Modulus (M_r) for Improved Subgrade	7,500 psi
Resilient Modulus (M_r) for Natural Subgrade	4,500 psi
Critical Soil Type	Clay Loam
Liquid Limit (LL)	33 percent
Plastic Limit (PL)	20 percent
Plasticity Index (PI)	13
Depth to Water	7 ft (flowline of the stream)
Natural Dry Density of Subgrade	115 pcf
Moisture Content of Subgrade	16 percent (approx. average)
Recommended Subgrade Treatment	Type IC

It is important to provide positive drainage during construction before the subgrade treatment is performed in order to reduce the risk of wet soil conditions requiring improvement in addition to the subgrade treatment. Ditches, if any, must be kept open at all times, and the subgrade should

be graded at the end of each day to facilitate drainage. Additionally, considering the nature of the project, the use of pavement subsurface drains, although beneficial, may not be economically feasible unless they are present in the existing roadway and would, therefore, need to be perpetuated. If subsurface drains are planned, we recommend the use of a Type 1A geotextile filter fabric in accordance with ISS 918.02(b). If subsurface drains are not used, we recommend that the crushed stone used for Type IC subgrade treatment be used to daylight the face of the slopes in order to allow drainage.

Structure Considerations

As mentioned earlier, mill and overlay of the existing pavement is planned on the west side of the structure between Sta. 14+50 and 14+95. Given the depth and skewed geometry of the structure located near Sta. 15+07, we anticipate that the full depth pavement replacement limits on the west side of the structure may not be sufficient to construct the structure using traditional slopes. Considering the 10-ft span with approximately 3 ft of working room on either side, as well as OSHA-required temporary cut slopes, we anticipate that a minimum length of about 11 ft each on either side of the culvert will be needed for traditional excavation procedures. As such, we anticipate that the backfill for the structure will extend couple of feet west of Sta. 14+95 where mill and overlay is planned. Therefore, consideration should be given to extending the limits of full depth pavement replacement where structure backfill is anticipated to extend on the west side.

Based on the planned profile, the placement of the structure is not anticipated to increase the load on the underlying soil. Subsurface conditions near the anticipated base of the culvert (i.e., El. 785) are anticipated to consist of medium stiff to stiff cohesive soils. These conditions are anticipated to be adequate for the support of the small structure provided the foundation soil is prepared as discussed below. Note that the cohesive soils are moisture-sensitive and easily disturbed. Even relatively stiff soils will soften rapidly when exposed to moisture and/or disturbance (e.g., from construction traffic). Consequently, we recommend that the base of the excavation be exposed immediately prior to placement of the culvert (i.e., not left open for an extended period of time).

The cohesive soils observed near the base of the structure are of moderate plasticity (i.e., LL of 29 percent and PI of 19). The moisture content observed near the subgrade were typically in the range of 20 to 26 percent and are relatively higher in comparison to the limits. As mentioned earlier, these cohesive soils are moisture-sensitive and easily disturbed. As such, because of the risk of soft yielding conditions (especially from inundation), we recommend that 4 in. of foundation soil be removed and replaced with a Class B concrete mud mat over the entire area of the culvert. The mud mat will provide protection of the underlying cohesive soils and provide a working surface. Although groundwater was not observed during drilling, flowline of the stream is anticipated to be near El. 786. As such, depending on the flow of the stream at the time of the construction, dewatering may be required.

The area around and above the culvert should be backfilled in accordance with ISS Section 714. Hand- or remote-guided vibratory compactors are recommended for compacting the bedding material and material on either side of the structure. Furthermore, we recommend the first several lifts of backfill over the culvert be compacted with small vibratory compactors to assure proper compaction is achieved and to prevent damage to the box from heavier, high-energy compactors.

Excavation and Dewatering Considerations

Excavations made for the project will require: 1) cut slopes adequate to prevent cave-ins/subsidence; or 2) braced excavations for safe construction operation. All excavations should conform with Occupational Safety and Health Administration (OSHA) requirements (i.e., 29 CFR Part 1926). The Contractor is solely responsible for constructing and maintaining stable excavations. Additionally, soil should not be stockpiled immediately adjacent to the top of the excavation.

As mentioned earlier, groundwater was not observed near the culvert subgrade during drilling. However, dewatering may be required depending on the flow of the stream at the time of construction. Based on our observations of the soil conditions and groundwater level observation made during our field work, infiltration into excavations can likely be controlled using conventional means (i.e., via a pump and filtered sump in a collection trench). We recommend that the groundwater level be lowered a minimum of 2 ft below the planned excavation base prior to the excavation activities. It should be noted that subgrade preparation is a function of the contractor's workmanship with regard to dewatering. Dewatering is sole responsibility of the contractor.

CONCLUDING REMARKS

In closing, we recommend that EEI be provided the opportunity to review the final design and project specifications to confirm that earthwork requirements have been properly interpreted and implemented in the design and specifications. We also recommend that EEI be retained to provide construction observation services during the earthwork and foundation phase of the project. This will allow us to verify that the construction proceeds in compliance with the design concepts, specifications and recommendations. It will also allow design changes to be made in the event that subsurface conditions differ from those anticipated.

We appreciate the opportunity to provide our services to you on this project. Contact our office if you have any questions or need further assistance with the project.

Sincerely,
EARTH EXPLORATION, A TERRACON COMPANY

Karan B. Doshi, E.I.
Staff Engineer

Kyle L. Zak, P.E.
Project Engineer

KYLE LAWRENCE ZAK
REGISTERED
PE11900382
STATE OF
INDIANA
PROFESSIONAL ENGINEER

Attachments –

APPENDIX A - Important Information about This Geotechnical Engineering Report
APPENDIX B - Field Methods for Exploring and Sampling Soils and Rock
APPENDIX C - Exploratory Location Plan (Drawing No. CJ195271.B1)
Log of Test Borings - General Notes
Log of Test Boring (4)
Pavement Core Logs (2)
Summary of Pavement Cores
Summary of Hand Auger Soundings
APPENDIX D - Unconfined Compression Test Result

APPENDIX A

IMPORTANT INFORMATION ABOUT THIS
GEOTECHNICAL ENGINEERING REPORT

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, clients can benefit from a lowered exposure to the subsurface problems that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed below, contact your GBA-member geotechnical engineer. Active involvement in the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Geotechnical-Engineering Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. *Those who rely on a geotechnical-engineering report prepared for a different client can be seriously misled*. No one except authorized client representatives should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. *And no one – not even you – should apply this report for any purpose or project except the one originally contemplated.*

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read it *in its entirety*. Do not rely on an executive summary. Do not read selected elements only. *Read this report in full.*

You Need to Inform Your Geotechnical Engineer about Change

Your geotechnical engineer considered unique, project-specific factors when designing the study behind this report and developing the confirmation-dependent recommendations the report conveys. A few typical factors include:

- the client's goals, objectives, budget, schedule, and risk-management preferences;
- the general nature of the structure involved, its size, configuration, and performance criteria;
- the structure's location and orientation on the site; and
- other planned or existing site improvements, such as retaining walls, access roads, parking lots, and underground utilities.

Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light-industrial plant to a refrigerated warehouse;
- the elevation, configuration, location, orientation, or weight of the proposed structure;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.*

This Report May Not Be Reliable

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, that it could be unwise to rely on a geotechnical-engineering report whose reliability may have been affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If your geotechnical engineer has not indicated an "apply-by" date on the report, ask what it should be*, and, in general, *if you are the least bit uncertain* about the continued reliability of this report, contact your geotechnical engineer before applying it. A minor amount of additional testing or analysis – if any is required at all – could prevent major problems.

Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface through various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing were performed*. The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgment to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team from project start to project finish, so the individual can provide informed guidance quickly, whenever needed.

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, *they are not final*, because the geotechnical engineer who developed them relied heavily on judgment and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* revealed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a full-time member of the design team, to:

- confer with other design-team members,
- help develop specifications,
- review pertinent elements of other design professionals' plans and specifications, and
- be on hand quickly whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction observation.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for informational purposes only*. To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report, but they may rely on the factual data relative to the specific times, locations, and depths/elevations referenced. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely*. Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures*. If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. As a general rule, *do not rely on an environmental report prepared for a different client, site, or project, or that is more than six months old.*

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, none of the engineer's services were designed, conducted, or intended to prevent uncontrolled migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, ***proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration.*** Confront the risk of moisture infiltration by including building-envelope or mold specialists on the design team. ***Geotechnical engineers are not building-envelope or mold specialists.***

GEOPROFESSIONAL BUSINESS ASSOCIATION

Telephone: 301/565-2733
e-mail: info@geoprofessional.org www.geoprofessional.org

APPENDIX B

FIELD METHODS FOR EXPLORING AND SAMPLING SOILS AND ROCK

FIELD METHODS FOR EXPLORING AND SAMPLING SOILS AND ROCK

A. Boring Procedures Between Samples

The boring is extended downward, between samples, by a hollow stem auger (AASHTO* Designation T251), continuous flight auger, driven and washed-out casing, or rotary boring with drilling mud or water.

B. Standard Penetration Test and Split-Barrel Sampling of Soils

(AASHTO* Designation: T206)

This method consists of driving a 2-in. outside diameter split-barrel sampler using a 140-lb weight falling freely through a distance of 30 in. The sampler is first seated 6 in. into the material to be sampled and then driven 12 in. The number of blows required to drive the sampler the final 12 in. is recorded on the Log of Test Boring and known as the Standard Penetration Resistance or N-value. Recovered samples are first classified as to texture by the field personnel. Later in the laboratory, the field classification is reviewed by a geotechnical engineer who observes each sample.

C. Thin-walled Tube Sampling of Soils

(AASHTO* Designation: T207)

This method consists of hydraulically pushing a 2-in. or 3-in. outside diameter thin wall tube into the soil, usually cohesive types. Relatively undisturbed samples are recovered.

D. Soil Investigation and Sampling by Auger Borings

(AASHTO* Designation: T203)

This method consists of augering a hole and removing representative soil samples from the auger flight or bucket at 5-ft intervals or with each change in the substrata. Relatively disturbed samples are obtained and its use is therefore limited to situations where it is satisfactory to determine approximate subsurface profile.

E. Diamond Core Drilling for Site Investigation

(AASHTO* Designation: T225)

This method consists of advancing a hole in rock or other hard strata by rotating downward a single tube or double tube core barrel equipped with a cutting bit. Diamond, tungsten carbide, or other cutting agents may be used for the bit. Wash water is used to remove the cuttings. Normally, a 3-in. outside diameter by 2-in. inside diameter coring bit is used unless otherwise noted. The rock or hard material recovered within the core barrel is examined in the field and laboratory. Cores are stored in partitioned boxes and the length of recovered material is expressed as a percentage of the actual distance penetrated.

* American Association of State Highway and Transportation Officials, Washington D.C.

APPENDIX C

EXPLORATORY LOCATION PLAN
(Drawing No. CJ195271.B1)

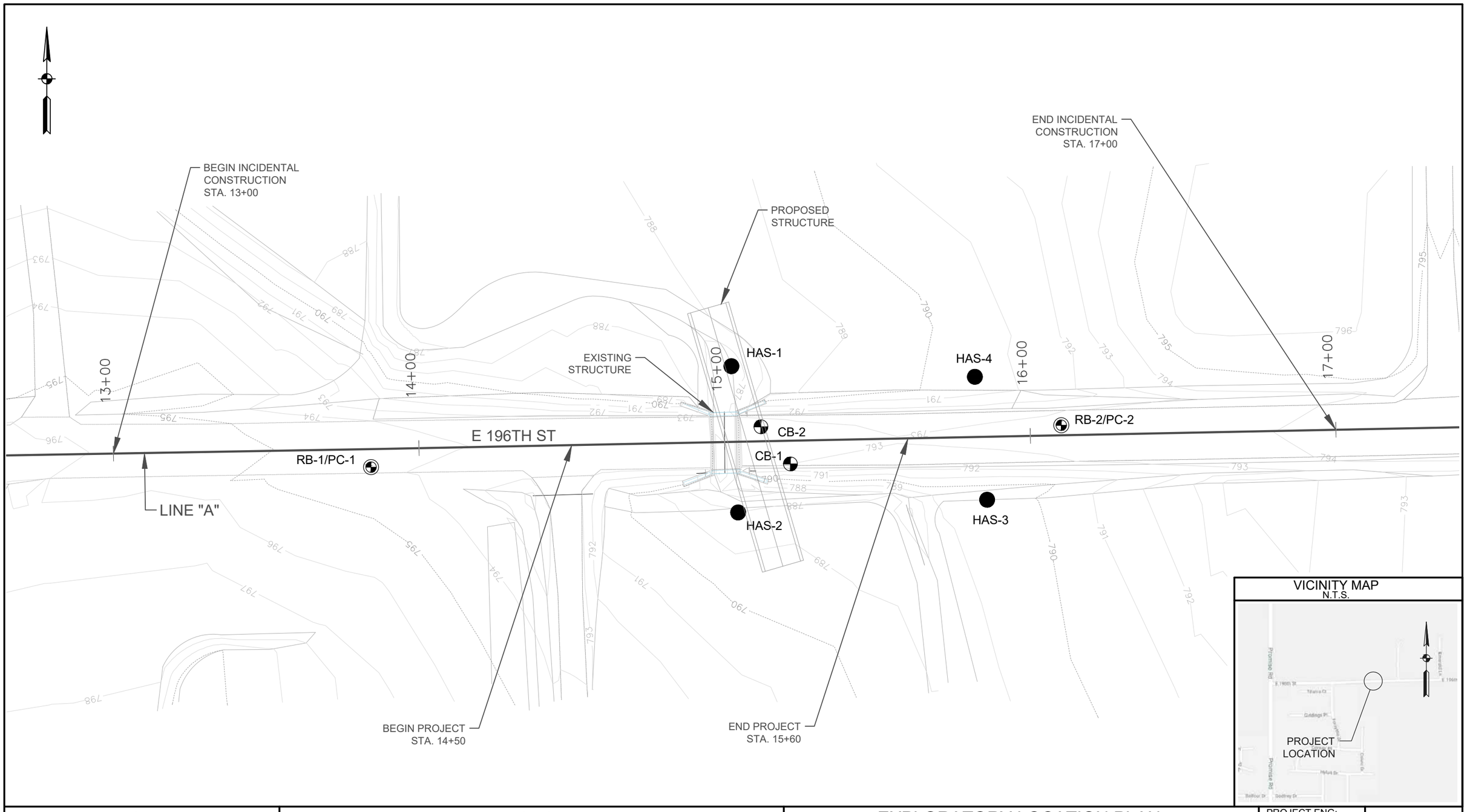
LOG OF TEST BORING - GENERAL NOTES

LOG OF TEST BORING (4)

PAVEMENT CORE LOGS (2)

SUMMARY OF PAVEMENT CORES

SUMMARY OF HAND AUGER SOUNDINGS



VICINITY MAP
N.T.S.

LEGEND

CB-1	◔	Test Boring Location and Designation
RB-1/PC-1	⊕	Test Boring and Pavement Core Location and Designation
HAS-1	●	Hand Auger Sounding Location and Designation

NOTES

1. Base map developed from an electronic file provided by SJCA P.C.
2. Vicinity map generated using imagery from google.com/maps.
3. Exploratory locations were located in the field by Earth Exploration, A Terracon Company on 1/23/20.
4. Ground surface elevations at the exploratory locations were interpolated to the nearest 1 ft based on topographic information obtained from SJCA P.C.
5. Exploratory locations are approximate.

EXPLORATORY LOCATION PLAN

PROJECT:	196th Street over Unknown Stream
LOCATION:	Hamilton County, Indiana
CLIENT:	SJCA P.C.
DES NO.:	Hamilton 22013
EEI PROJ. NO.:	CJ195271
SCALE:	1" = 30'

PROJECT ENG: KBD
APPROVED BY: GO
DRAWN BY: JLJ
DATE: 3/30/2020

EARTH EXPLORATION, A Terracon COMPANY

DRAWING NO.:
CJ195271.B1

LOG OF TEST BORING – GENERAL NOTES

DESCRIPTIVE CLASSIFICATION

GRAIN SIZE TERMINOLOGY

Soil Fraction	Particle Size	US Standard Sieve Size
Boulders	Larger than 75 mm	Larger than 3”
Gravel	4.76 mm to 75 mm	#10 to 75 mm
Sand: Coarse	2.00 to 4.76 mm	#40 to #10
Fine	0.075 to 0.42 mm	#200 to #40
Silt	0.002 to 0.075 mm	Smaller than #200
Clay	Smaller than 0.002 mm	Smaller than #200

GENERAL TERMINOLOGY

Physical Characteristics
- Color, moisture, grain shape fineness, etc.

Major Constituents
- Clay silt, sand, gravel

Structure
- Laminated, varved, fibrous, stratified, cemented, fissured, etc.

Geologic Origin
- Glacial, alluvial, eolian, residual, etc.

RELATIVE PROPORTIONS OF COHESIONLESS SOILS

Term	Defining Range by % of Weight
Trace	1 – 10%
Little	11 – 20%
Some	21 – 35%
And	36 – 50%

ORGANIC CONTENT BY COMBUSTION METHOD

Soil Description	LOI
w/ organic matter	4 – 15 %
Organic Soil (A-8)	16 – 30%
Peat (A-8)	More than 30%

RELATIVE DENSITY

Term	“N” Value
Very loose	0 – 5
Loose	6 – 10
Medium dense	11 – 30
Dense	31 – 50
Very Dense	51+

CONSISTENCY

Term	“q_p”
Very soft	0.0 – 0.25
Soft	0.25 – 0.5
Medium	0.5 – 1.0
Stiff	1.0 – 2.0
Very Stiff	2.0 – 4.0
Hard	4.0+

PLASTICITY

Term	Plastic Index
None to slight	0 – 4
Slight	5 – 7
Medium	8 – 22
High/Very High	Over 22

The penetration resistance, N, is the summation of the number of blows required to effect two successive 6-in. penetrations of the 2-in. split-barrel sampler. The sampler is driven with a 140-lb weight falling 30 in. and is seated to a depth of 6 in. before commencing the standard penetration test.

SYMBOLS

DRILLING AND SAMPLING

AS	–	Auger Sample
BS	–	Bag Sample
C	–	Casing Size 2½”, NW, 4”, HW
COA	–	Clean-Out Auger
CS	–	Continuous Sampling
CW	–	Clear Water
DC	–	Driven Casing
DM	–	Drilling Mud
FA	–	Flight Auger
FT	–	Fish Tail
HA	–	Hand Auger
HSA	–	Hollow Stem Auger
NR	–	No Recovery
PMT	–	Borehole Pressuremeter Test
PT	–	3” O.D. Piston Tube Sample
PTS	–	Peat Sample
RB	–	Rock Bit
RC	–	Rock Coring
REC	–	Recovery
RQD	–	Rock Quality Designation
RS	–	Rock Sounding
S	–	Soil Sounding
SS	–	2” O.D. Split-Barrel Sample
2ST	–	2” O.D. Thin-Walled Tube Sample
3ST	–	3” O.D. Thin-Walled Tube Sample
VS	–	Vane Shear Test
WPT	–	Water Pressure Test

LABORATORY TESTS

q_p	–	Penetrometer Reading, tsf
q_u	–	Unconfined Strength, tsf
W	–	Moisture Content, %
LL	–	Liquid Limit, %
PL	–	Plastic Limit, %
PI	–	Plasticity Index
SL	–	Shrinkage Limit, %
LOI	–	Loss on Ignition, %
γ_d	–	Dry Unit Weight, pcf
pH	–	Measure of Soil Alkalinity/Acidity

WATER LEVEL MEASUREMENT

BF	–	Backfilled upon Completion
NW	–	No Water Encountered

Note: Water level measurements shown on the boring logs represent conditions at the time indicated and may not reflect static levels, especially in cohesive soils.

EARTH EXPLORATION
A Terracon COMPANY

LOG OF TEST BORING

Project: 196th Street over Unkown Stream
Location: Hamilton County
Client: SJCA P.C.

7770 West New York Street - Indianapolis, Indiana 46214
317-273-1690 / 317-273-2250 (Fax)

Boring No. CB-1
Elevation 793
Datum IN East
EEI Proj. No. CJ195271
Sheet 1 of 1

Proj. No.	---	Station	15+21	Weather	Cloudy	Driller	D.C.
Struct. No.	Hamilton 22013	Offset	8 Rt. "A"	Temp.	34° F	Inspector	---

SAMPLE No.	Type	Rec %	N Value	Depth ft	Elev	DESCRIPTION/CLASSIFICATION and REMARKS	q_p tsf	q_u tsf	γ_d pcf	W %	LL %	PL %	PI %
						ASPHALTIC CONCRETE							
SS-1	X	20	13		790		¼			7.7			
SS-2	X	70	18	5			1¼			18.1			
SS-3	X	80	8		785	**CLAY LOAM**, soft to stiff, moist, brown, with sandy loam seam near 1.5 ft (fill to 2 ft)	1¼			18.6			
SS-4	X	95	11	10			½			20.0	29	10	19
SS-5	X	70	14		780		>4½			7.6			
SS-6	X	95	24	15		**LOAM**, hard, moist, brown	4½	8.36	133.4	9.7			
SS-7	X	95	12		775								
SS-8	X	65	8	20 ▼									
SS-9	X	65	8	▽ 25	770								
SS-10	X	95	20	30	765	**SAND**, loose to medium dense, moist to wet below 24 ft, brown, with gravelly sand seam near 29 ft							
SS-11	X	95	12	35	760								
SS-12	X	95	24	40	755	**LOAM**, hard, moist, gray	4¼			8.8			
						End of Boring at 40 ft Shelby tube obtained at offset location.							

WATER LEVEL OBSERVATIONS

Depth ft	▽ While Drilling	▼ Upon Completion	⊽ After Drilling
To Water	24	20	BF
To Cave-in		21	

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.

GENERAL NOTES

Start 2/1/20 End 2/1/20 Rig CME 75
Drilling Method 3¼" I.D. HSA Truck
Remarks: Backfilled with auger cuttings and bentonite chip plug and concrete plug at surface.

EARTH EXPLORATION
A Terracon COMPANY

LOG OF TEST BORING

Project: 196th Street over Unkown Stream
Location: Hamilton County
Client: SJCA P.C.

7770 West New York Street - Indianapolis, Indiana 46214
317-273-1690 / 317-273-2250 (Fax)

Boring No. CB-2
Elevation 793
Datum IN East
EEI Proj. No. CJ195271
Sheet 1 of 1

Proj. No.	---	Station	15+12	Weather	Cloudy	Driller	D.C.
Struct. No.	Hamilton 22013	Offset	5 Lt. "A"	Temp.	34° F	Inspector	---

SAMPLE No.	Type	Rec %	N Value	Depth ft	Elev	DESCRIPTION/CLASSIFICATION and REMARKS	q_p tsf	q_u tsf	γ_d pcf	W %	LL %	PL %	PI %
						ASPHALTIC CONCRETE							
SS-1	X	55	22				1¼			12.8			
					790	**LOAM**, stiff to hard, moist, brown (fill)							
SS-2	X	65	8	5			4			9.0			
SS-3	X	80	7				1½			19.1			
					785	**CLAY LOAM**, stiff, moist, brown							
SS-4	X	85	8	10			1			25.8			
SS-5	X	95	13				>4½	6.70	129.8	10.9	21	14	7
					780	**LOAM**, very stiff to hard, moist, brown							
SS-6	X	80	9	15			2¾			10.3			
SS-7	X	95	8										
					775								
SS-8	X	95	12	20									
				▽	770								
SS-9	X	95	14	25									
					765	**SAND**, loose to medium dense, moist to wet below 23 ft, brown							
SS-10	X	95	18	30									
SS-11	X	95	13		760								
				35									
					755								
SS-12	X	95	27	40		**LOAM**, hard, moist, gray	4¼			9.0			
						End of Boring at 40 ft							

WATER LEVEL OBSERVATIONS

Depth ft	▽ While Drilling	▼ Upon Completion	⩛ After Drilling
To Water	23	NW	BF
To Cave-in		20	

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.

GENERAL NOTES

Start 1/28/20 End 1/28/20 Rig CME 75
Drilling Method 3¼" I.D. HSA Truck
Remarks: Backfilled with auger cuttings and bentonite chip plug and concrete plug at surface.

EARTH EXPLORATION
A Terracon COMPANY

LOG OF TEST BORING

Project: 196th Street over Unkown Stream
Location: Hamilton County
Client: SJCA P.C.

7770 West New York Street - Indianapolis, Indiana 46214
317-273-1690 / 317-273-2250 (Fax)

Boring No. RB-1/PC-1
Elevation 794
Datum IN East
EEI Proj. No. CJ195271
Sheet 1 of 1

Proj. No.	---	Station	13+84	Weather	Cloudy	Driller	D.C.
Struct. No.	Hamilton 22013	Offset	6 Rt. "A"	Temp.	32° F	Inspector	---

SAMPLE No.	Type	Rec %	N Value	Depth ft	Elev	DESCRIPTION/CLASSIFICATION and REMARKS	q_p tsf	q_u tsf	γ_d pcf	W %	LL %	PL %	PI %
				0		**ASPHALTIC CONCRETE**, (7 in)							
SS-1	X	65	12			**GRANULAR SUBBASE**, (crushed stone), (5 in)	3		119.8	12.3	23	14	9
SS-2	X	90	19		790		1¾			7.4			
				5		**LOAM**, stiff to very stiff, moist, brown, with cobbles near 4 ft (fill to 8 ft)							
SS-3	X	80	16				3¼			11.2			
SS-4	X	95	25		785		3¾			10.0			
				10		End of Boring at 10 ft							

WATER LEVEL OBSERVATIONS

Depth ft	While Drilling	Upon Completion	After Drilling
To Water	NW	NW	BF
To Cave-in		7	

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.

GENERAL NOTES

Start 1/29/20 End 1/29/20 Rig CME 75
Drilling Method 3¼" I.D. HSA Truck
Remarks: Backfilled with auger cuttings and bentonite chip plug and concrete plug at surface.

EARTH EXPLORATION
A Terracon COMPANY

LOG OF TEST BORING

Project: **196th Street over Unkown Stream**
Location: **Hamilton County**
Client: **SJCA P.C.**

7770 West New York Street - Indianapolis, Indiana 46214
317-273-1690 / 317-273-2250 (Fax)

Boring No. **RB-2/PC-2**
Elevation **793**
Datum **IN East**
EEI Proj. No. **CJ195271**
Sheet **1** of **1**

Proj. No.	---	Station	16+10	Weather	Cloudy	Driller	D.C.
Struct. No.	Hamilton 22013	Offset	3 Lt. "A"	Temp.	32° F	Inspector	---

SAMPLE No.	Type	Rec %	N Value	Depth ft	Elev	DESCRIPTION/CLASSIFICATION and REMARKS	q_p tsf	q_u tsf	γ_d pcf	W %	LL %	PL %	PI %
						ASPHALTIC CONCRETE, (7 in)							
SS-1	X	55	17			**GRANULAR SUBBASE**, (crushed stone), (5 in)				-			
					790	**GRAVELLY SAND**, medium dense, moist, brown (fill)							
SS-2	X	70	7				1½			22.9	33	20	13
				5									
SS-3	X	70	10			**CLAY LOAM**, medium stiff to stiff, moist, brown, with trace marl, LOI = 3%, $CaMgCo_3$ = 3 to 4%	1¼			21.2			
					785								
SS-4	X	80	9				¾			18.6			
				10									
						End of Boring at 10 ft							

WATER LEVEL OBSERVATIONS

Depth ft	While Drilling	Upon Completion	After Drilling
To Water	NW	NW	BF
To Cave-in		7	

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.

GENERAL NOTES

Start **1/29/20** End **1/29/20** Rig **CME 75**
Drilling Method **3¼" I.D. HSA** **Truck**
Remarks: **Backfilled with auger cuttings and bentonite chip plug and concrete plug at surface.**

PAVEMENT CORE LOG NO. RB-1/PC-1

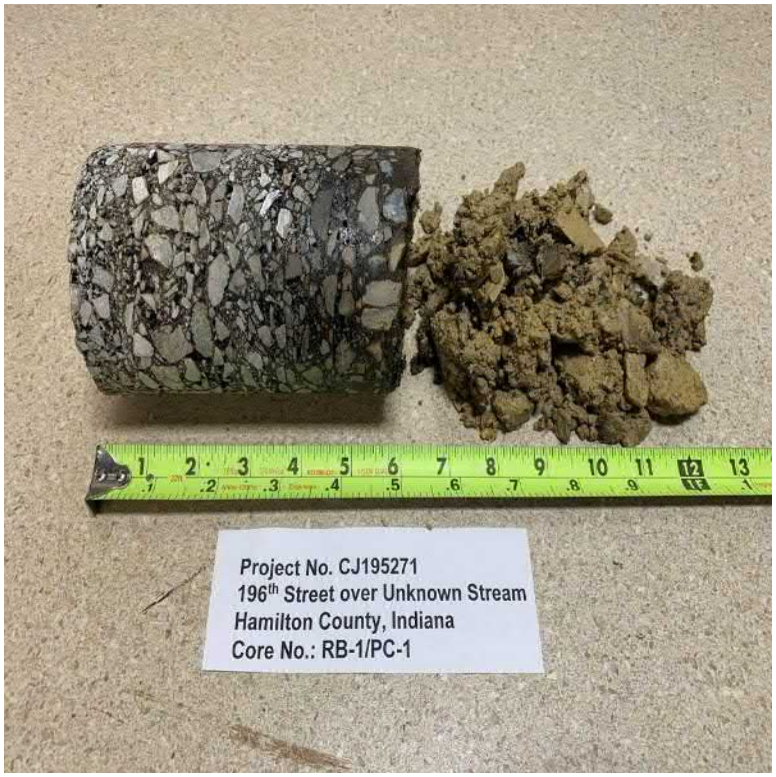
PROJECT: Hamilton County Small Structure 22013

CLIENT: SJCA PC
Indianapolis, IN

SITE: 196th St
Hamilton County, IN

Latitude: 40.0732° Longitude: -85.9672° Station: 13+84 Offset: 6 ft Rt. "A" Northing: 1757515 Easting: 243988

GRAPHIC LOG	DEPTH		DEPTH (In.)
	1.0	**HMA**, 9.5mm surface	1
	2.4	**HMA**, 12.5mm intermediate, voided	2
	4.3	**HMA**, 12.5mm intermediate, voided	3
	6.1	**HMA**, 9.5mm surface	4
	7.0	**HMA**, stripped, not recovered	5
	13.0	**Granular Subbase**, crushed stone	6
			7
			8
			9
			10
			11
			12
			13
		Boring Terminated at 13 Inches	



EARTH EXPLORATION, a Terracon company
7770 W New York St
Indianapolis, IN

Coring Started: 1/29/2020	Coring Completed: 1/29/2020
Drill Rig: CME 75 Truck	Driller: DC
Project No.: CJ195271	

PAVEMENT CORE LOG NO. RB-2/PC-2

PROJECT: Hamilton County Small Structure 22013

CLIENT: SJCA PC
Indianapolis, IN

SITE: 196th St
Hamilton County, IN

Latitude: 40.0733° Longitude: -85.9665° Station: 16+10 Offset: 3 ft Lt. "A" Northing: 1757527 Easting: 244188

GRAPHIC LOG	DEPTH		DEPTH (In.)
	DEPTH		
	1.9	**HMA**, 12.5mm surface, voided, delaminated	1
	3.7	**HMA**, stripped	2 3
	5.1	**HMA**, 9.5mm surface, voided	4 5
	7.0	**HMA**, 12.5mm intermediate, voided	6 7
	13.0	**Granular Subbase**, crushed stone	8 9 10 11 12
		Boring Terminated at 13 Inches	13

EARTH EXPLORATION, a Terracon company
7770 W New York St
Indianapolis, IN

Coring Started: 1/29/2020	Coring Completed: 1/29/2020
Drill Rig: CME 75 Truck	Driller: DC
Project No.: CJ195271	

Summary of Pavement Cores

196th Street over Unknown Stream
Hamilton Co., Indiana

Core	Latitude	Longitude	Indiana State Plane East (ft)		Direction	Lane	Date	Overall Thickness (in)	Overall Type	Layer 1 Thickness (in.)	Layer 1 Type	Subbase Type	Subbase Thickness (in.)
			Easting	Northing									
RB-1/PC-1	40.07323	-85.96716	243988	1757515	Eastbound	Travel	1/29/20	7.0	HMA	7.0	HMA	crushed stone	5.0
RB-2/PC-2	40.07326	-85.96645	244188	1757527	Westbound	Travel	1/29/20	7.0	HMA	7.0	HMA	crushed stone	5.0

Note: While the measurements of layer and overall core thicknesses are reported to the nearest tenth of an inch, an inherent variation in the pavement thickness will occur due to the size of the aggregate. Depending on the aggregate size, the variation in measurements could be 1/2 to 3/4 in.

SUMMARY OF HAND AUGER SOUNDINGS

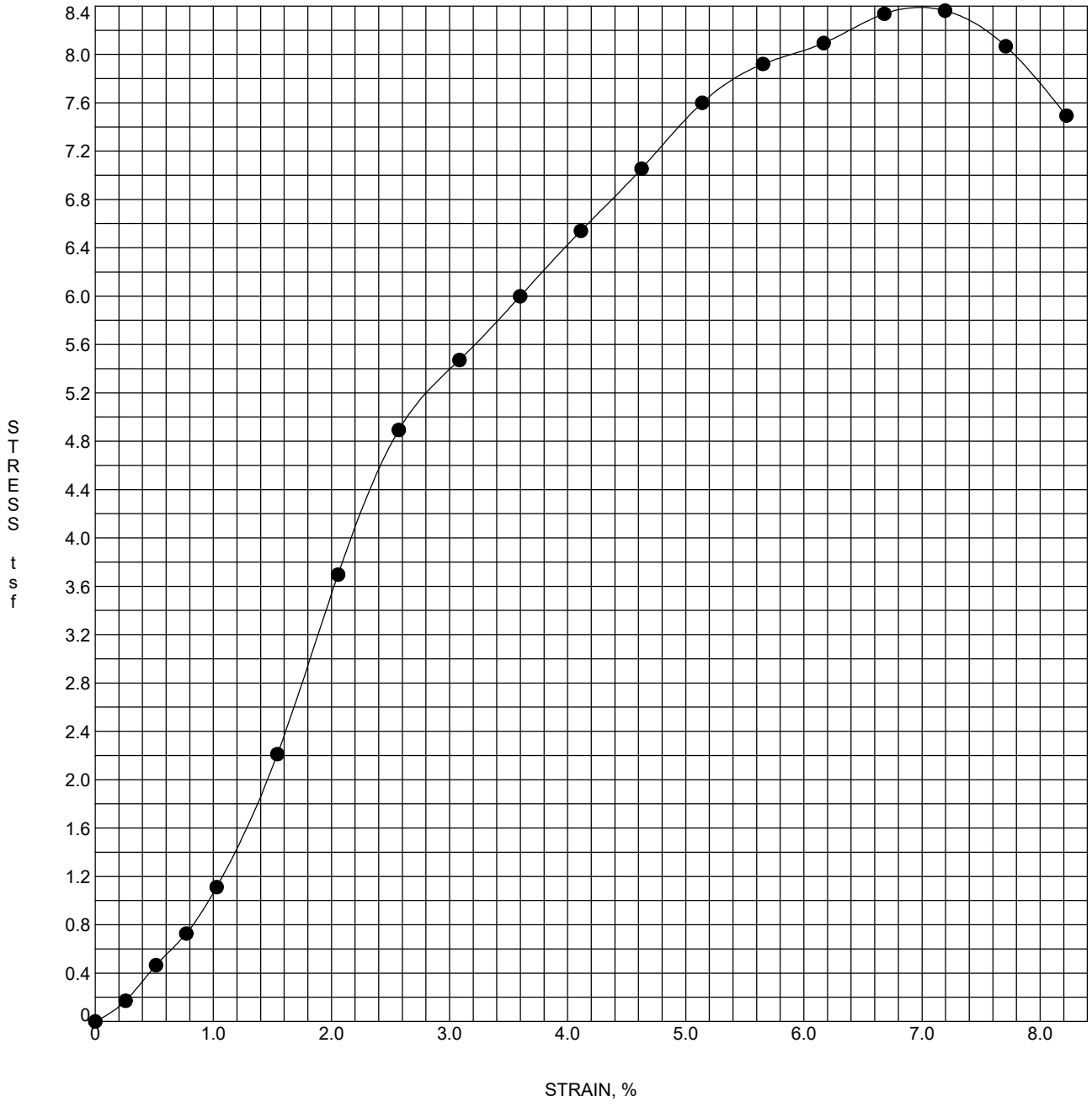
Project: 196th Street over Unnamed Stream
Location: Hamilton County, Indiana
Client: SJCA P.C.
Structure No.: Hamilton 22013
EEI Project No.: CJ195271

Sounding No.	Station	Offset Line "A"	Approx. Ground Surface Elevation	Depth Interval (ft)	**Description** - All Classifications are visual
HAS-1	15+00	25' Left	787	0 - ½ ½ - 3	Topsoil Clay Loam, soft (up to 1 ft) to medium stiff (moisture content - 24 percent)
HAS-2	15+05	23' Right	788	0 - ¼ ¼ - 3	Topsoil Clay Loam, soft (up to 1 ft) to medium stiff (moisture content - 22 percent)
HAS-3	15+85	20' Right	789	0 - ½ ½ - 3	Topsoil Clay Loam, soft (up to 1 ft) to medium stiff (moisture content - 23 to 27 percent)
HAS-4	15+80	20' Left	791	0 - ¼ ¼ - 3	Topsoil Clay Loam, soft (up to 1 ft) to medium stiff (moisture content - 20 percent)

Note: Consistency description based on ability to advance ½-in diameter steel rod probe

APPENDIX D

UNCONFINED COMPRESSION TEST RESULTS (2)



	Sample Identification	Station / Offset / Line	Depth, ft	Classification
●	CB-1 SS-6	15+21 8 Rt. "A"	13.5 - 15.0	LOAM

Lab No.	Sample Ht., mm	Sample Diam., mm	Initial M.C., %	Initial Wet Den, pcf	Initial Dry Den, pcf	Sat., %	Unc. Comp. Strength, tsf	Failure Strain, %	Rate of Strain to Failure, %
	69.2	34.5	9.7	146.4	133.4	96.7	8.36	7.2	1.0

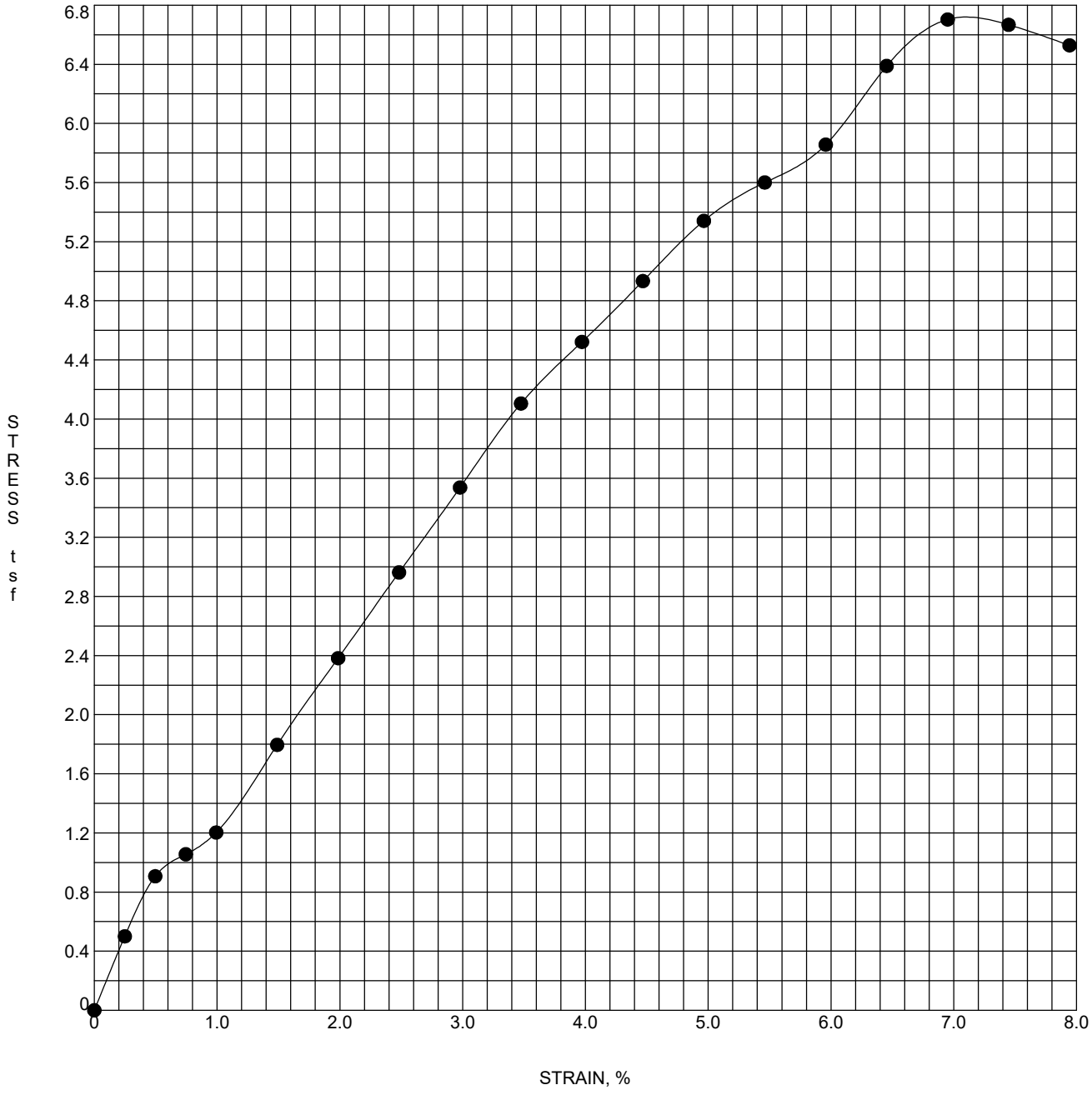
EARTH EXPLORATION
A Terracon COMPANY

Project No. ---
Structure No. Hamilton 22013
EEI Proj. No. CJ195271

Project 196th Street over Unkown Stream
Location Hamilton County
Client SJCA P.C.

UNCONFINED COMPRESSION TEST

Earth Exploration, Inc.
7770 West New York Street, Indianapolis, IN 46214
317-273-1690 / 317-273-2250 (Fax)



	Sample Identification	Station / Offset / Line	Depth, ft	Classification
●	CB-2 SS-5	15+12 5 Lt. "A"	11.0 - 12.5	LOAM

Lab No.	Sample Ht., mm	Sample Diam., mm	Initial M.C., %	Initial Wet Den, pcf	Initial Dry Den, pcf	Sat., %	Unc. Comp. Strength, tsf	Failure Strain, %	Rate of Strain to Failure, %
	71.6	35.0	10.9	143.9	129.8	96.1	6.70	7.0	1.0

EARTH EXPLORATION
A Terracon COMPANY

Project No. --- **Project** 196th Street over Unkown Stream

Structure No. Hamilton 22013 **Location** Hamilton County

EEI Proj. No. CJ195271 **Client** SJCA P.C.

UNCONFINED COMPRESSION TEST

Earth Exploration, Inc.
7770 West New York Street, Indianapolis, IN 46214
317-273-1690 / 317-273-2250 (Fax)

Date: 4/13/2020

Subject:

Utility Relocation Work Plan for:	AT&T-D
Facility Type:	Communication

Section 1: General Information

A. HAMILTON COUNTY Project Information

1.	DES NO.:	N/A
2.	Route Number:	196th Street Small Structure Replacement over Dry Branch or Musselman Ditch
3.	Location:	0.27 E of Promise Road
4.	Work Type:	Small Structure Replacement / Reconstruction of Roadway Approaches
5.	Letting Date:	September 2, 2020
6.	Date Work Plan Needed	March 7, 2020
7.	Target Date for Utility to be out of conflict with HAMILTON COUNTY Project	September 2, 2020
	Intermediate Phase	Enter Target Date
	Intermediate Phase	Enter Target Date

B. Utility Designated Contact – Information

1.	Designated Contact Name:	Brad Bailey
2.	Office telephone:	317-610-5422
3.	Mobile telephone:	317-459-4769
4.	Email address:	bb3525@att.com
5.	Agency name	AT&T-D
6.	Address:	240 N. Meridian St.
7.	City, State, Zip Code:	Indianapolis, IN 46204
8.	Construction Emergency Contact:	
	Name:	Steve Adamson
	Number:	(317) 897-9588

C. By signing here, the Utility has determined to the best of their ability that they do not have facilities within the project area:

Signature of Utility Representative

Print Name

Date

Note: A signature by the utility representative at item "(C)" fulfills the requirement to complete the rest of this form and affirms their contact information above is correct

D. HAMILTON COUNTY Utility Coordinator Contact Information

1.	Utility Coordinator Name:	Michael DiFranco
2.	Office Telephone:	317-566-0629x498
3.	Mobile Telephone:	312-909-0151
4.	Email Address:	mdifranco@sjca-pc.com
5.	Agency Name:	SJCA P.C.
6.	Address:	9102 N. Meridian Street, Suite 200
7.	City, State, Zip Code	Indianapolis, IN 46260

Section 2: A narrative description of the facility relocation that will be required.

A. Describe what types of existing active and inactive facilities are present.
Active aerial and copper cables are present. There are also two poles. See Drawing.

B. Describe the location of existing active and inactive facilities.
Aerial copper and fiber cables that run east and west are on the north side of 196th St. See Drawing

C. Describe what will be done with existing active and inactive facilities.
New cables to replace existing aerial active cables will be buried at 3' offset from North R/W. See Drawing

D. Describe the details of the proposed new facilities.
We will be placing new buried fiber and copper cables. See drawing.

E. Describe the proposed location of the new facilities.
See C and drawing.

F. By signing here, the Utility has determined to the best of their ability that they have facilities within the project area and the facilities are not in conflict with the project based upon the plans received on **<Enter Date Received Plans>**

_____ _____

Signature of Utility Representative Print Name Date

Note: A signature by the utility representative at item "(F)" fulfills the requirement to complete the rest of this form and affirms their contact information above is correct.

Section 3: A statement whether the facility relocation is or is not dependent on the acquisition of additional property interests with a description of that work.
N/A

Section 4: A statement whether the utility is or is not willing to allow the HAMILTON COUNTY contractor to do the required work as part of the highway contract.
No, an authorized AT&T contractor will complete our work.

Section 5: From the date the work plan is approved by both parties; please provide the Utility's pre-construction scheduling information.

A.	The expected lead time in calendar days to obtain required permits:	30
B.	The expected lead time in calendar days to obtain materials:	30
C.	The expected lead time in calendar days to schedule work crews:	45
D.	If the contractor is being selected by competitive bid what is the date of selection?	N/A
E.	The expected lead time in calendar days to obtain new property interests:	N/A
F.	The earliest date when the utility could begin to implement the pre-construction activities of the work plan:	14 days after approved work plan.
G.	The total number of calendar days for pre-construction activities: (accounting for concurrent activities)	60

Section 6: The Utility Construction Scheduling Information.

A. A statement whether the facility relocation is or is not dependent on work to be done by another utility with a description of that work.

1. Utility A, with a description of the required work.
   N/A

2. Utility B, with a description of the required work.

3. Utility C, with a description of the required work.

B. A statement whether the facility relocation is or is not dependent on work to be done by the department or the department's contractor with a description of that work.

1. Work item A
   Hamilton County will need to acquire, clear and stake all R/W prior to AT&T's work.

2. Work item B

3. Work item C

C. How many calendar days after the events identified in Sec 6 A and B are completed can the utility begin construction: **14**

D. The number of calendar days to complete the relocation work: **120 days after official NTP.**

Section 7: A drawing of sufficient detail with station, offset, elevations, and scale to show the proposed location of the facility relocation, which takes precedence over the narrative description of the work, needs to be on HAMILTON COUNTY Construction drawings. Plans must be attached to this Work Plan Document.

Section 8: For each work plan the utility shall include a cost estimate for the facility relocation. For reimbursable work the estimate will identify betterment and salvage which is not reimbursable.

Section 9: For work the utility is entitled to be compensated by the Department, the work plan shall include documentation of property interests and compensable land rights.

Section 10: The implementation of this approved work plan is dependent upon the issuance of: (a notice to proceed will be provided when items in Section 6 are accomplished)

Items Completed	Yes	Not Applicable
An executed reimbursement agreement with HAMILTON COUNTY:	☐	☒
A relocation permit from HAMILTON COUNTY:	☒	☐

(Note: Double-click on box in Yes or NA to mark it with an "X")

Brad Bailey

Signature of Utility Representative

4/13/2020

Date

Brad Bailey

Utility Representative Name Printed

Type text here

HAMILTON COUNTY use only below this point ---------- HAMILTON COUNTY use only below this point

HAMILTON COUNTY use only below this point ---------- HAMILTON COUNTY use only below this point

The following sections are to be used by HAMILTON COUNTY personnel to review the utility relocation work plan.

Section 11: The Department shall review the work plan to ensure that it:

Description	Yes	No	Initials
(1.a) is compatible with department permit requirements	☒	☐	MDF
(1.b) is compatible with the project plans	☒	☐	MDF
(1.c) is compatible with the construction schedule	☒	☐	MDF
(1.d) is compatible with other utility relocation work plans	☒	☐	MDF
(2.a) has reasonable relocation scheme	☒	☐	MDF
(2.b) has a reasonable cost for compensable work	☒	☐	MDF

(**Note**: Double-click on box under Yes or No to mark it with an "X")

Comments on any sections (1.a – 2.b) that were marked No:

Michael D. Franco — 4/20/20

Utility Coordinator Signature — Date

MICHAEL D. FRANCO SJCA, INC.

Utility Coordinator Name Printed

Section 12: Approved Work Plan.

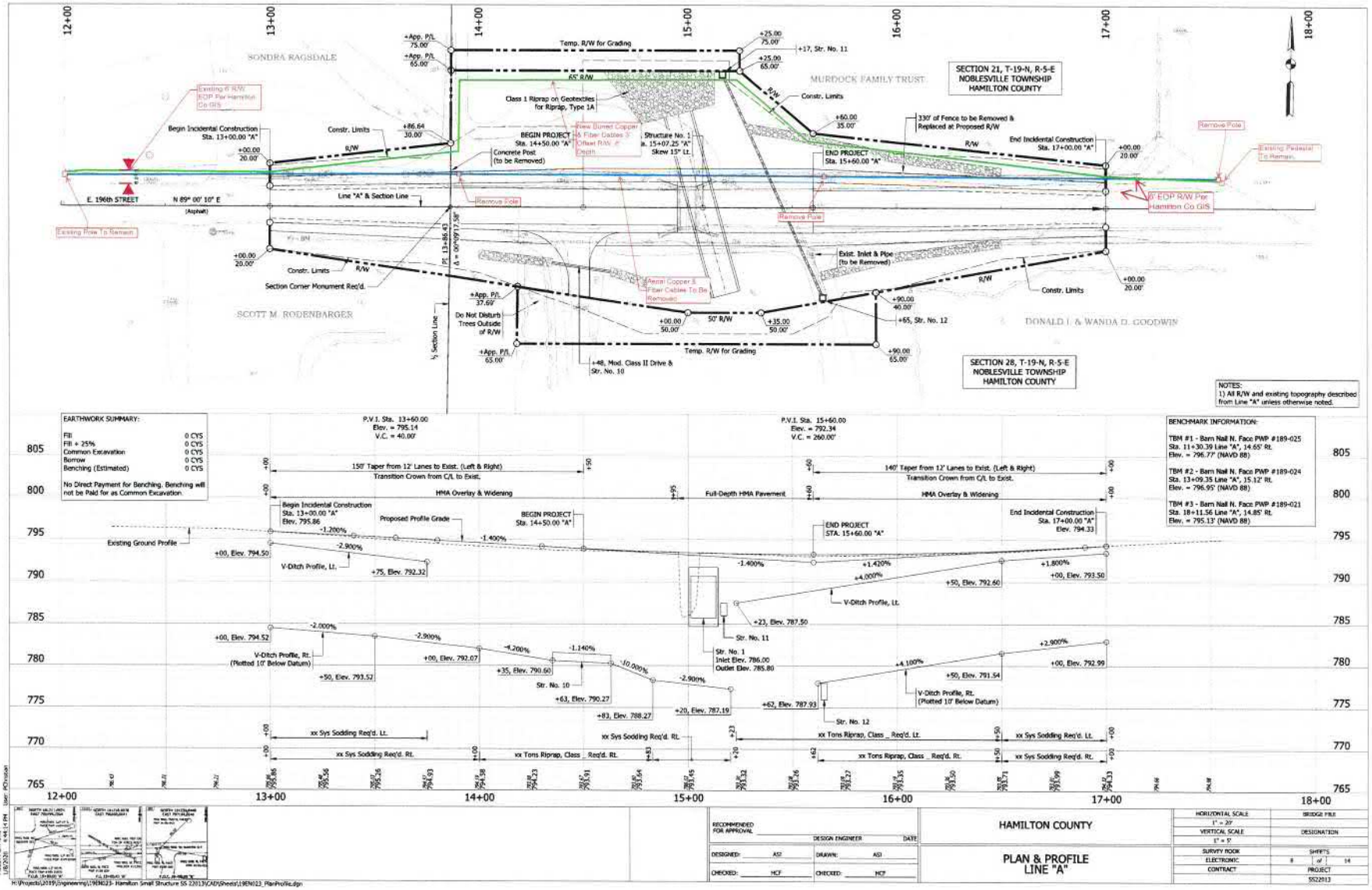
I have reviewed the work plan and found it acceptable.

Aaron Goslee — 11/6/20

Project Manager Signature — Date

Aaron Goslee

Project Manager Name Printed


SONDRA RAGSDALE
MURDOCK FAMILY TRUST
SCOTT M. RODENBARGER
DONALD I. & WANDA D. GOODWIN
SECTION 21, T-19-N, R-5-E
NOBLESVILLE TOWNSHIP
HAMILTON COUNTY
SECTION 28, T-19-N, R-5-E
NOBLESVILLE TOWNSHIP
HAMILTON COUNTY
E. 196th STREET
N 89° 00' 10" E
(Asphalt)
Begin Incidental Construction Sta. 13+00.00 "A"
BEGIN PROJECT Sta. 14+50.00 "A"
END PROJECT Sta. 15+60.00 "A"
End Incidental Construction Sta. 17+00.00 "A"
Structure No. 1 a. 15+07.25 "A" Skew 15° Lt.
Temp. R/W for Grading
Class 1 Riprap on Geotextiles for Riprap, Type 1A
Constr. Limits
Line "A" & Section Line
Section Corner Monument Req'd.
Concrete Post (to be Removed)
330' of Fence to be Removed & Replaced at Proposed R/W
Exist. Inlet & Pipe (to be Removed)
Remove Pole
Existing Pedestal To Remain
Existing R/W EOP Per Hamilton Co GIS
Existing Pole To Remain
Aerial Copper & Fiber Cables To Be Removed
Do Not Disturb Trees Outside of R/W
½ Section Line
+48, Mod. Class II Drive & Str. No. 10
+65, Str. No. 12
+17, Str. No. 11
NOTES:
1) All R/W and existing topography described from Line "A" unless otherwise noted.
EARTHWORK SUMMARY:
Fill 0 CYS
Fill + 25% 0 CYS
Common Excavation 0 CYS
Borrow 0 CYS
Benching (Estimated) 0 CYS
No Direct Payment for Benching. Benching will not be Paid for as Common Excavation.
P.V.I. Sta. 13+60.00
Elev. = 795.14
V.C. = 40.00'
P.V.I. Sta. 15+60.00
Elev. = 792.34
V.C. = 260.00'
150' Taper from 12' Lanes to Exist. (Left & Right)
Transition Crown from C/L to Exist.
HMA Overlay & Widening
Full-Depth HMA Pavement
140' Taper from 12' Lanes to Exist. (Left & Right)
Transition Crown from C/L to Exist.
HMA Overlay & Widening
Existing Ground Profile
Proposed Profile Grade
V-Ditch Profile, Lt.
V-Ditch Profile, Rt. (Plotted 10' Below Datum)
Str. No. 10
Str. No. 11
Str. No. 12
Str. No. 1 Inlet Elev. 786.00 Outlet Elev. 785.80
xx Sys Sodding Req'd. Lt.
xx Sys Sodding Req'd. Rt.
xx Tons Riprap, Class _ Req'd. Lt.
xx Tons Riprap, Class _ Req'd. Rt.
BENCHMARK INFORMATION:
TBM #1 - Barn Nail N. Face PWP #189-025
Sta. 11+30.39 Line "A", 14.65' Rt.
Elev. = 796.77' (NAVD 88)
TBM #2 - Barn Nail N. Face PWP #189-024
Sta. 13+09.35 Line "A", 15.12' Rt.
Elev. = 796.95' (NAVD 88)
TBM #3 - Barn Nail N. Face PWP #189-021
Sta. 18+11.56 Line "A", 14.85' Rt.
Elev. = 795.13' (NAVD 88)
RECOMMENDED FOR APPROVAL
DESIGN ENGINEER
DATE
DESIGNED: ASI
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HAMILTON COUNTY
PLAN & PROFILE
LINE "A"
HORIZONTAL SCALE 1" = 20'
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SURVEY BOOK
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CONTRACT
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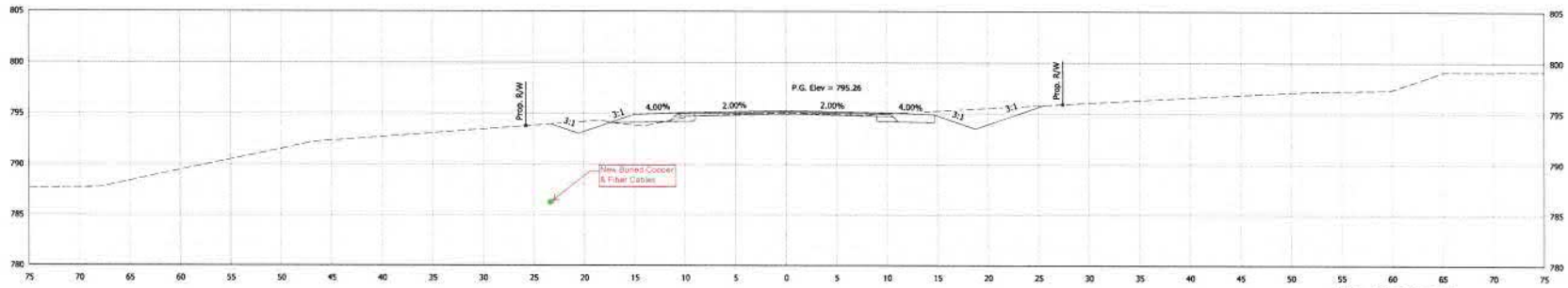
SHEETS
PROJECT
R522913



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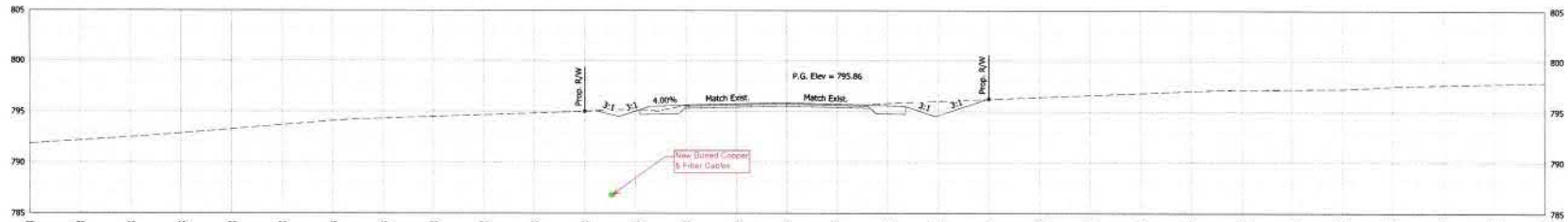

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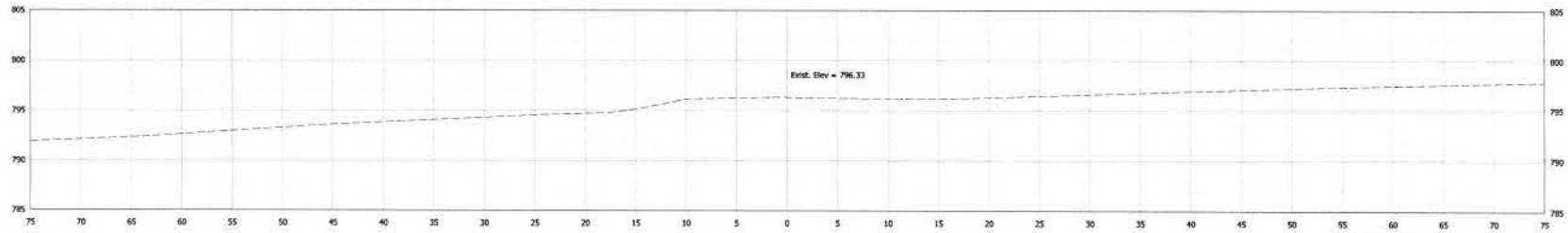

12+50.00 R1

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: ASI DRAWN: ASI
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HAMILTON COUNTY

CROSS SECTIONS
LINE "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 5'	
VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEETS
ELECTRONIC	10 of 14
CONTRACT	PROJECT
	5522013

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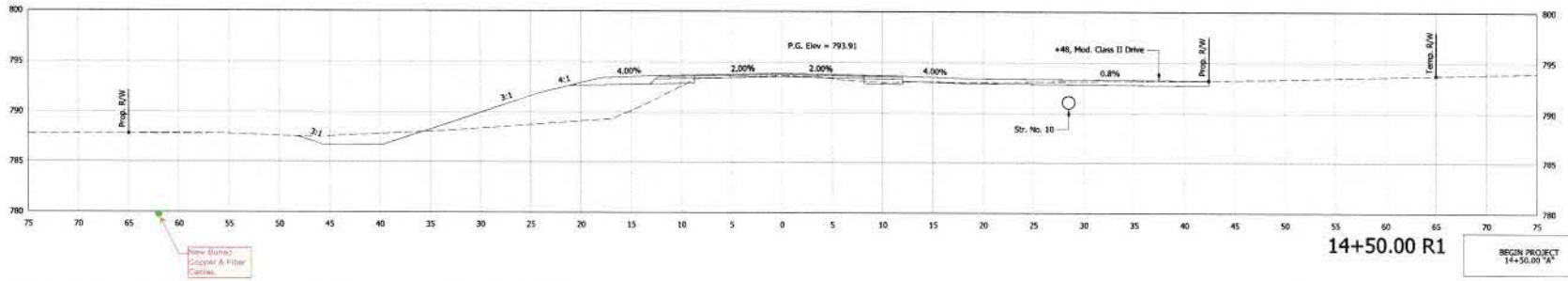

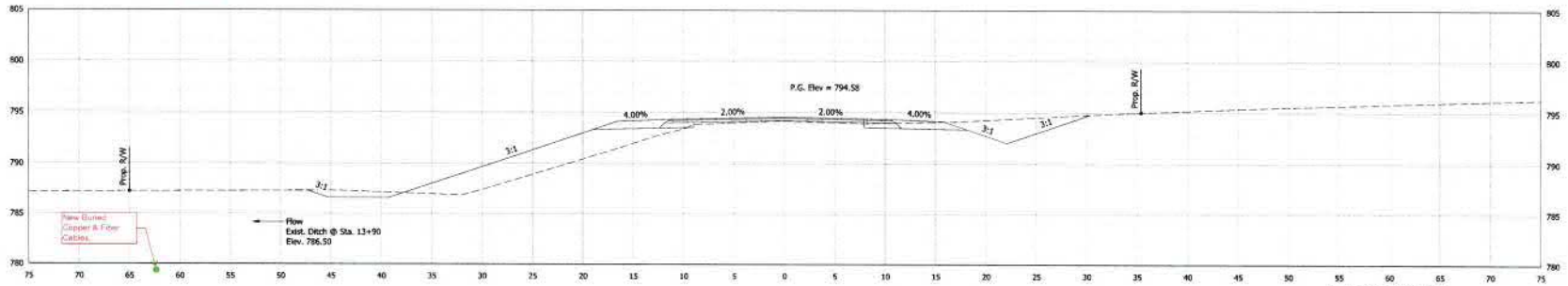

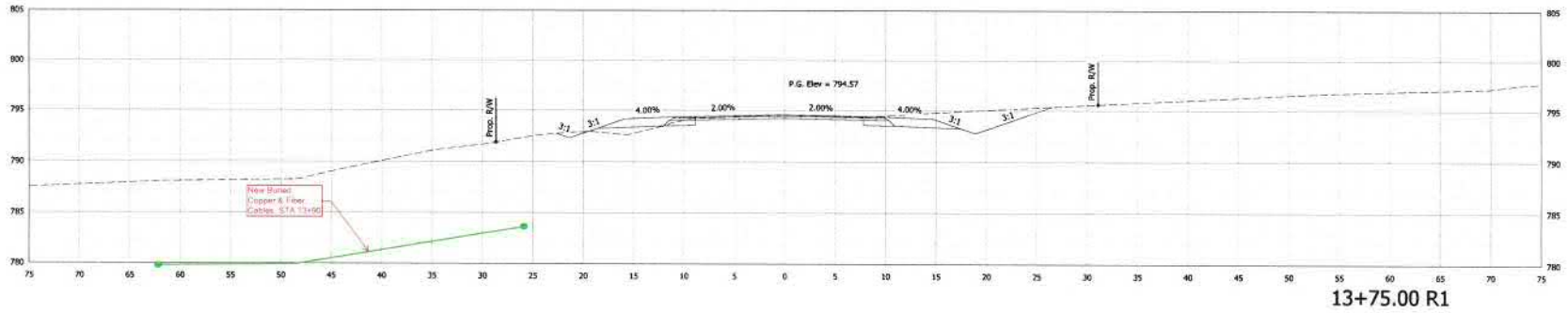

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: ASI DRAWN: ASI

CHECKED: HCF CHECKED: HCF

HAMILTON COUNTY

CROSS SECTIONS
LINE "A"

HORIZONTAL SCALE	BRIDGE FILE
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CONTRACT	PROJECT
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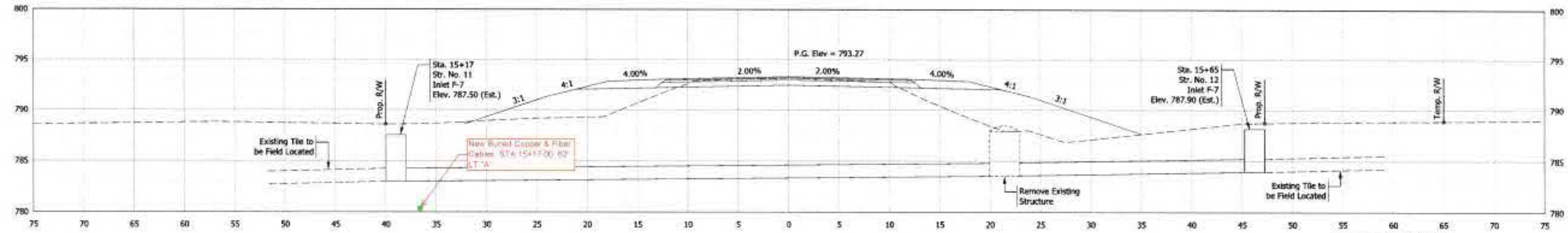

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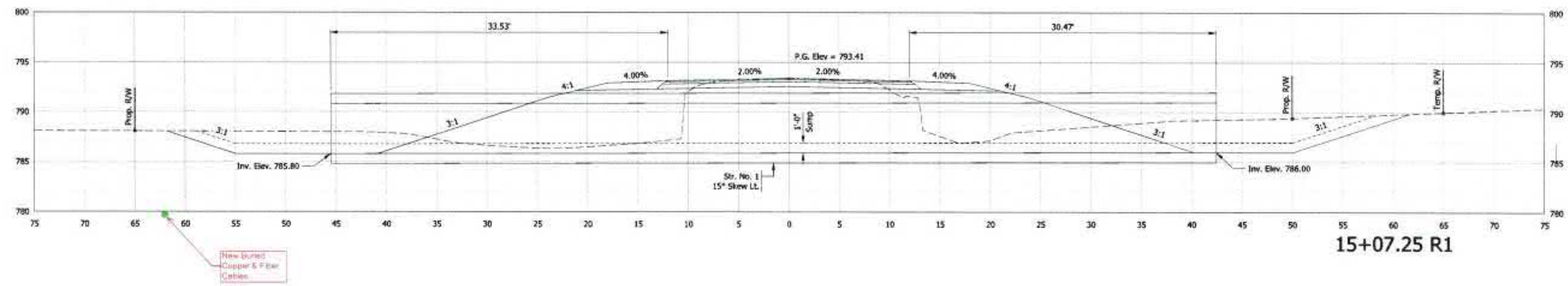

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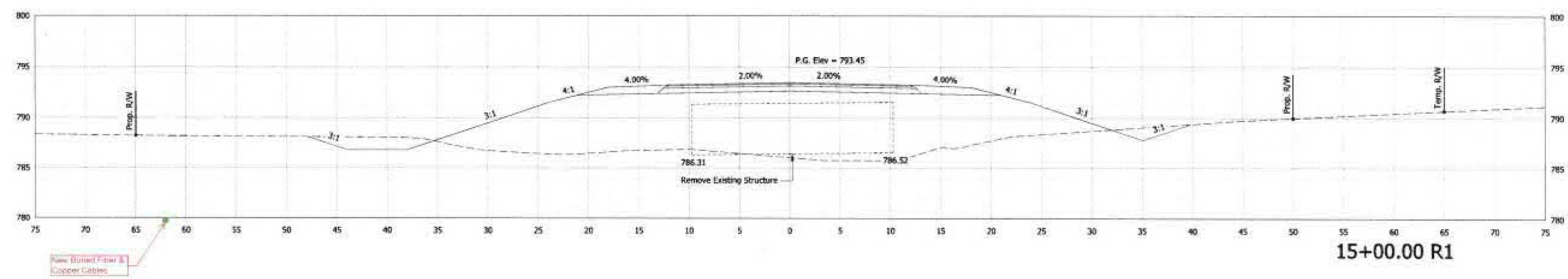

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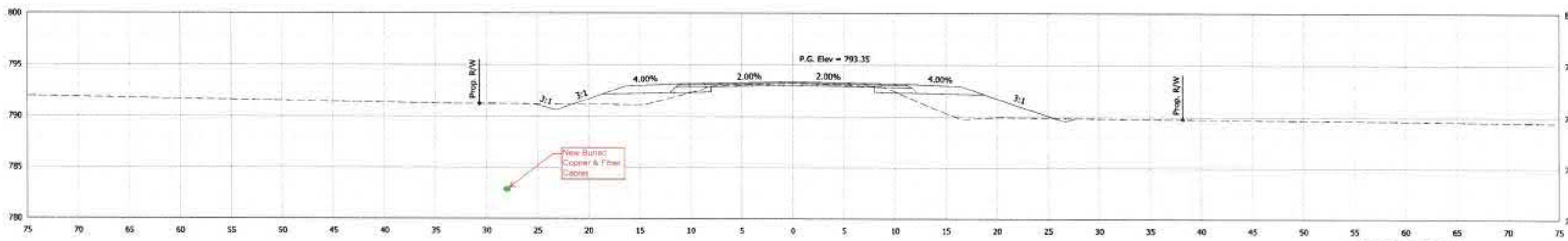
HAMILTON COUNTY

CROSS SECTIONS LINE "A"

HORIZONTAL SCALE 1" = 5'	BRIDGE FILE
VERTICAL SCALE 1" = 5'	DESIGNATION
SURVEY BOOK	SHEETS 12 of 14
ELECTRONIC	PROJECT
CONTRACT	5522013



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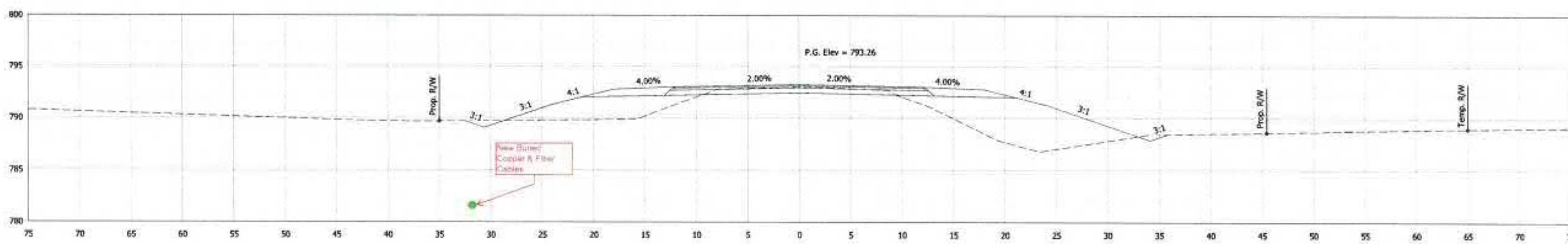

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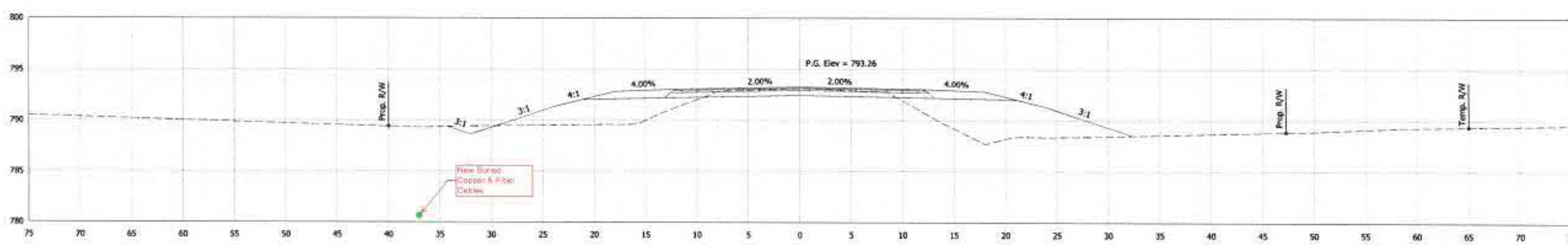

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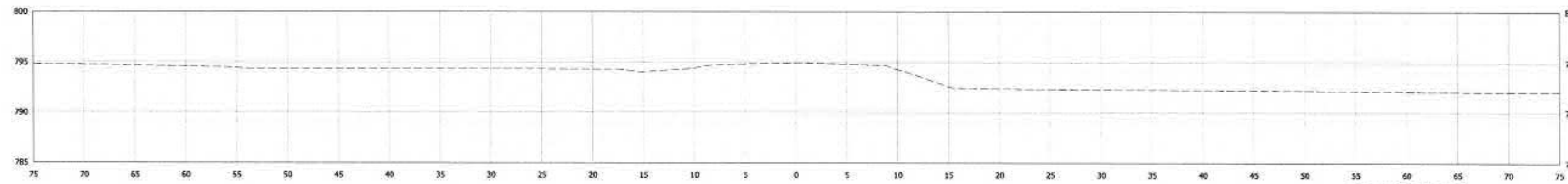

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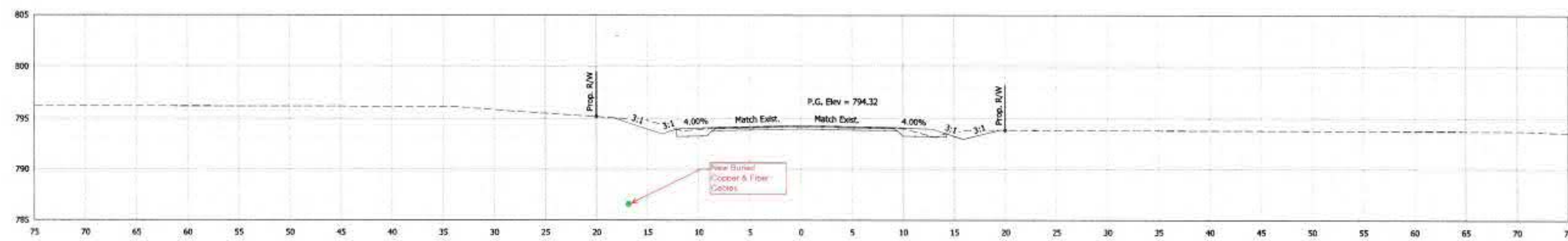

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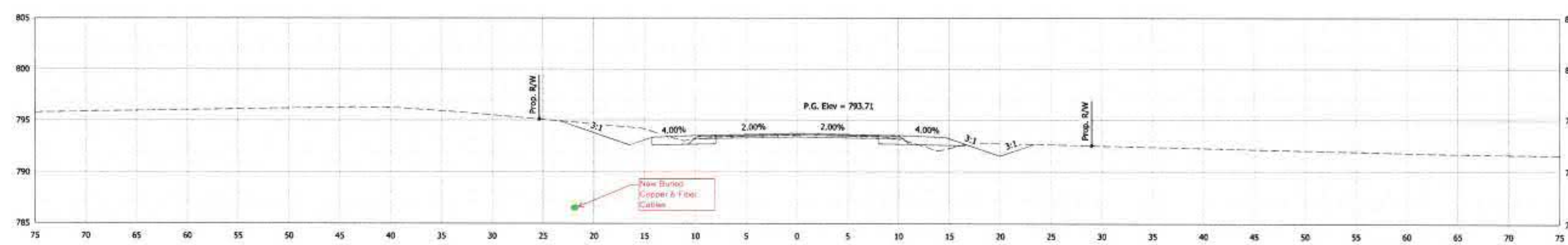

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		VERTICAL SCALE 1" = 5'	DESIGNATION
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		CONTRACT	9522013

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5330 East 65th Street | Indianapolis, IN 46220 | 800-391-3000

Date: 12-02-2020

Subject:

Utility Relocation Work Plan for:	Comcast
Facility Type:	CATV/Communications

Section 1: General Information

A. HAMILTON COUNTY Project Information

1.	DES NO.:	N/A
2.	Route Number:	196th Street Small Structure Replacement over Dry Branch or Musselman Ditch
3.	Location:	0.27 E of Promise Road
4.	Work Type:	Small Structure Replacement / Reconstruction of Roadway Approaches
5.	Letting Date:	September 2, 2020
6.	Date Work Plan Needed	March 7, 2020
7.	Target Date for Utility to be out of conflict with HAMILTON COUNTY Project	September 2, 2020
	Intermediate Phase	Enter Target Date
	Intermediate Phase	Enter Target Date

B. Utility Designated Contact – Information

1.	Designated Contact Name:	Scott Evans
2.	Office telephone:	317.752.6569
3.	Mobile telephone:	317.752.6569
4.	Email address:	sevans@telecomplacement.com
5.	Agency name	Comcast
6.	Address:	5330 East 65th Street
7.	City, State, Zip Code:	Indianapolis, IN 46220
8.	Construction Emergency Contact:	
	Name:	For routine questions during regular business hours, please contact Scott Evans, section 1B; for emergency issues such as damaged facilities, contact 1-800-266-2278 (1-800-COMCAST)
	Number:	1-800-266-2278

C. By signing here, the Utility has determined to the best of their ability that they do not have facilities within the project area:

Signature of Utility Representative Print Name Date

Note: A signature by the utility representative at item "(C)" fulfills the requirement to complete the rest of this form and affirms their contact information above is correct

D. HAMILTON COUNTY Utility Coordinator Contact Information

1.	Utility Coordinator Name:	Michael DiFranco
2.	Office Telephone:	317-566-0629x498
3.	Mobile Telephone:	312-909-0151
4.	Email Address:	mdifranco@sjca-pc.com
5.	Agency Name:	SJCA P.C.
6.	Address:	9102 N. Meridian Street, Suite 200
7.	City, State, Zip Code	Indianapolis, IN 46260

Section 2: A narrative description of the facility relocation that will be required.

A. Describe what types of existing active and inactive facilities are present.
Facilities consist of underground coaxial cables with associated electronics and support structures.

B. Describe the location of existing active and inactive facilities.
Facilities are buried within the public Right of Way along the north side of 196th St.

C. Describe what will be done with existing active and inactive facilities.
Facilities will be relocated to a greater depth of 10' within the construction area.

D. Describe the details of the proposed new facilities.
Facilities will be in kind.

E. Describe the proposed location of the new facilities.
See "C" and attachment.

F. By signing here, the Utility has determined to the best of their ability that they have facilities within the project area and the facilities are not in conflict with the project based upon the plans received on **<Enter Date Received Plans>**

_____ _____

Signature of Utility Representative Print Name Date

Note: A signature by the utility representative at item "(F)" fulfills the requirement to complete the rest of this form and affirms their contact information above is correct.

Section 3: A statement whether the facility relocation is or is not dependent on the acquisition of additional property interests with a description of that work.
NA

Section 4: A statement whether the utility is or is not willing to allow the HAMILTON COUNTY contractor to do the required work as part of the highway contract.
Comcast is not willing to allow the HAMILTON COUNTY contractor to do the required work as part of the highway contract.

Section 5: From the date the work plan is approved by both parties; please provide the Utility's pre-construction scheduling information.

A.	The expected lead time in calendar days to obtain required permits:	**30**
B.	The expected lead time in calendar days to obtain materials:	**30**
C.	The expected lead time in calendar days to schedule work crews:	**30**
D.	If the contractor is being selected by competitive bid what is the date of selection?	**NA**
E.	The expected lead time in calendar days to obtain new property interests:	**NA**
F.	The earliest date when the utility could begin to implement the pre-construction activities of the work plan:	**After written notice of Duke energy's completion of relocation of its facilities. And power must be re-energized.**
G.	The total number of calendar days for pre-construction activities: (accounting for concurrent activities)	**30**

Section 6: The Utility Construction Scheduling Information.

A. A statement whether the facility relocation is or is not dependent on work to be done by another utility with a description of that work.

1. Utility A, with a description of the required work.
   Duke energy must complete its relocation of its facilities. And power must be re-energized.

2. Utility B, with a description of the required work.
   NA

3. Utility C, with a description of the required work.
   NA

B. A statement whether the facility relocation is or is not dependent on work to be done by the department or the department's contractor with a description of that work.

1. Work item A
   NA

2. Work item B
   NA

3. Work item C
   NA

C. How many calendar days after the events identified in Sec 6 A and B are completed can the utility begin construction: NA

D. The number of calendar days to complete the relocation work: **45**

Section 7: A drawing of sufficient detail with station, offset, elevations, and scale to show the proposed location of the facility relocation, which takes precedence over the narrative description of the work, needs to be on HAMILTON COUNTY Construction drawings. Plans must be attached to this Work Plan Document.

See Attachment

Section 8: For each work plan the utility shall include a cost estimate for the facility relocation. For reimbursable work the estimate will identify betterment and salvage which is not reimbursable.

NA

Section 9: For work the utility is entitled to be compensated by the Department, the work plan shall include documentation of property interests and compensable land rights.

NA

Section 10: The implementation of this approved work plan is dependent upon the issuance of: (a notice to proceed will be provided when items in Section 6 are accomplished)

Items Completed	Yes	Not Applicable
An executed reimbursement agreement with HAMILTON COUNTY:	☐	☒
A relocation permit from HAMILTON COUNTY:	☒	☐

(Note: Double-click on box in Yes or NA to mark it with an "X")

Scott Evans

Digitally signed by Scott Evans
DN: cn=Scott Evans, o=Telecom Placement, ou, email=sevans@telecomplacement.com, c=US
Date: 2020.12.03 08:53:49 -05'00'

Signature of Utility Representative

Date

Utility Representative Name Printed

5330 East 65th Street | Indianapolis, IN 46220 | 800-391-3000

HAMILTON COUNTY use only below this point ---------- HAMILTON COUNTY use only below this point

The following sections are to be used by HAMILTON COUNTY personnel to review the utility relocation work plan.

Section 11: The Department shall review the work plan to ensure that it:

Description	Yes	No	Initials
(1.a) is compatible with department permit requirements	☒	☐	MDF
(1.b) is compatible with the project plans	☒	☐	MDF
(1.c) is compatible with the construction schedule	☒	☐	MDF
(1.d) is compatible with other utility relocation work plans	☒	☐	MDF
(2.a) has reasonable relocation scheme	☒	☐	MDF
(2.b) has a reasonable cost for compensable work	☐	☐ N/A	MDF

(**Note**: Double-click on box under Yes or No to mark it with an "X")

Comments on any sections (1.a – 2.b) that were marked No:

Michael D. Franco — Utility Coordinator Signature

12/3/20 — Date

MICHAEL D. FRANCO, SJCA, INC. — Utility Coordinator Name Printed

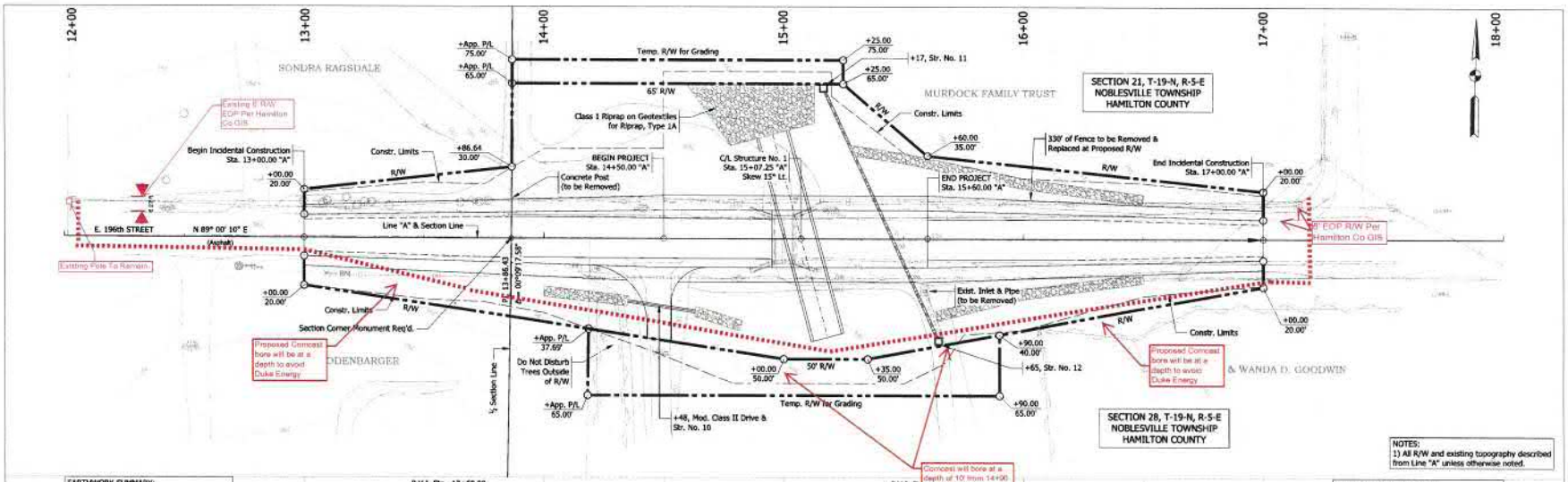
Section 12: Approved Work Plan.

I have reviewed the work plan and found it acceptable.

Aaron Goslee — Project Manager Signature

12/3/2020 — Date

Aaron Goslee, SJCA Inc. — Project Manager Name Printed



RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE
DESIGNED: ASI
DRAWN: ASI
CHECKED: MCF
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HAMILTON COUNTY

PLAN & PROFILE
LINE "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
1" = 5'	
SURVEY BOOK	SHEETS
ELECTRONIC	8 of 14
CONTRACT	PROJECT
	5522013

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Date: **September 1, 2020**

Subject:

Utility Relocation Work Plan for:	**Duke Energy**
Facility Type:	**Electric Distribution**

Section 1: General Information

A. Hamilton County's Project Information

1.	Des Number.:	**N/A**
2.	Route Number:	**196th St**
3.	Location:	**0.27 miles E of Promise Rd**
4.	Work Type:	**Small Structure Replacement**
5.	Letting Date:	**TBD**
6.	Date Work Plan Needed:	**May 13, 2020**
7.	Target Date for Utility to be out of conflict with INDOT Project:	**TBD**
	Intermediate Phase:	**n/a**
	Intermediate Phase:	**n/a**

B. Utility Designated Contact – Information

1.	Designated Contact Name:	**Luis Alvarez**
2.	Office telephone:	**765-454-6169**
3.	Mobile telephone:	**765-431-1911**
4.	Email address:	**Luis.alvarez@duke-energy.com**
5.	Agency name:	**Duke Energy**
6.	Address:	**1619 W Defenbaugh St**
7.	City, State, Zip Code:	**Kokomo, IN 46901**
8.	Construction Emergency Contact:	
	Name:	**Luis Alvarez**
	Number:	**765-431-1911**

**** For Outage and Damage Issues please contact 1-800-521-2232 ****

C. By signing here, the Utility has determined to the best of their ability that they do not have facilities within the project area:

_____ _____

Signature of Utility Representative Print Name Date

Note: A signature by the utility representative at item "(C)" fulfills the requirement to complete the rest of this form and affirms their contact information above is correct

D. Hamilton County's Utility Coordinator Contact Information

1.	Utility Coordinator Name:	**Mike DiFranco**
2.	Office Telephone:	**317 566 0629**
3.	Mobile Telephone:	
4.	Email Address:	**mdifranco@sjcainc.com**
5.	Agency Name:	**SJCA Inc.**
6.	Address:	**9102 North Meridian St., Suite 200**
7.	City, State, Zip Code	**Indianapolis IN 46260**

Section 2: A narrative description of the facility relocation that will be required. [IAC 13-3-3(c)]

A. Describe what types of existing active and inactive facilities are present.

There is an existing 12.47/7.2 KVA 3-ph OH pole line in the south side of 196th St along the project area. A single phase OH primary line crosses the roadway on the east side of the project.

Duke Energy is unable to confirm whether or not there are any underground, inactive Duke Energy facilities present. Regardless, any such inactive facilities should be considered abandoned in place, and therefore, subject to neither removal nor preservation by Duke Energy.

B. Describe the location of existing active and inactive facilities.

There is an existing 12.47/7.2 KVA 3-ph OH pole line in the south side of 196th St along the project area. A single phase OH primary line crosses the roadway on the east side of the project.

Duke Energy is unable to confirm whether or not there are any underground, inactive Duke Energy facilities present. Regardless, any such inactive facilities should be considered abandoned in place, and therefore, subject to neither removal nor preservation by Duke Energy.

C. Describe what will be done with existing active and inactive facilities.

The existing OH pole line will be relocated as stated in Exhibit A. Pole 189-023 will be relocated approximately 97' W of its existing position in line with the existing OH line, a 25' Double Downguy will be installed. Pole 189-022 will be relocated 32' E of its existing position, in line with the existing OH line, a 25' Double Downguy will be installed. The OH lines between 189-022 and 189-023 will be removed and replaced with an UG three-phase conductor running along the R/W (within 1' and 3') in the southside of the project as shown in Exhibit A. The minimum depth for the UG line will be 5'. The single phase OH line will be relocated as pole 189-022 will be moving E as indicated in Exhibit A.

Duke Energy is unable to confirm whether or not there are any underground, inactive Duke Energy facilities present. Regardless, any such inactive facilities should be considered abandoned in place, and therefore, subject to neither removal nor preservation by Duke Energy.

PLEASE REFER TO THE OSHA WEBSITE FOR ALL CLEARANCE REQUIREMENTS BASED ON THE VOLTAGE OF OUR LINES LISTED ABOVE.

http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=19

WARNING: ANY ORANGE OR YELLOW COVER-UP THAT DUKE ENERGY WOULD PLACE ON THE DISTRIBUTION LINE WOULD BE FOR VISUAL IDENTIFICATION ONLY AND WILL NOT PROTECT AGAINST THE TRAVEL OF ELECTRICTY, THEREFORE ALL WIRES WOULD BE CONSIDERED BARE, UNINSULATED, AND ENERGIZED AT ALL TIMES.

IF THE CONTRACTOR WOULD LIKE VISUAL COVER INSTALLED ON THE DISTRIBUTION WIRES, THEY

WILL NEED TO CONTACT THE DUKE ENERGY CALL CENTER FOR SCHEDULING AT 1.800.521.2232, MONDAY THROUGH FRIDAY FROM 7A TO 7P OR ON SATURDAY FROM 8A TO 1P.

D. Describe the details of the proposed new facilities.

The existing OH pole line will be relocated as stated in Exhibit A. Pole 189-023 will be relocated approximately 97' W of its existing position in line with the existing OH line, a 25' Double Downguy will be installed. Pole 189-022 will be relocated 32' E of its existing position, in line with the existing OH line, a 25' Double Downguy will be installed. The OH lines between 189-022 and 189-023 will be removed and replaced with an UG three-phase conductor running along the R/W (within ~~1'~~ 2' and 3') in the southside of the project as shown in Exhibit A. The minimum depth for the UG line will be ~~5'~~ 6'. The single phase OH line will be relocated as pole 189-022 will be moving E as indicated in Exhibit A.

E. Describe the proposed location of the new facilities.

The existing OH pole line will be relocated as stated in Exhibit A. Pole 189-023 will be relocated approximately 97' W of its existing position in line with the existing OH line, a 25' Double Downguy will be installed. Pole 189-022 will be relocated 32' E of its existing position, in line with the existing OH line, a 25' Double Downguy will be installed. The OH lines between 189-022 and 189-023 will be removed and replaced with an UG three-phase conductor running along the R/W (within ~~1'~~ 2' and 3') in the southside of the project as shown in Exhibit A. The minimum depth for the UG line will be ~~5'~~ 6'. The single phase OH line will be relocated as pole 189-022 will be moving E as indicated in Exhibit A.

F. By signing here, the Utility has determined to the best of their ability that they have facilities within the project area and the facilities are not in conflict with the project based upon the plans received on N/A

Signature of Utility Representative | Print Name | Date

Note: A signature by the utility representative at item "(F)" fulfills the requirement to complete the rest of this form and affirms their contact information above is correct.

Section 3: A statement whether the facility relocation is or is not dependent on the acquisition of additional property interests with a description of that work. [IAC 13-3-3(c) (2) (B)]

(A) Duke Energy must have acquired all ROW, RR, State or Federal permits before relocation construction begins.
(B) Duke Energy must have acquired all private "possessory rights" needed for the approved relocation plan before relocation construction begins.
(C) Duke Energy will not be acquiring easements for the said project.

Section 4: A statement whether the utility is or is not willing to allow the INDOT contractor to do the required work as part of the highway contract. [IAC 13-3-3(c) (3)]

Duke Energy Indiana is not willing to have a Hamilton County's contractor perform the required

relocation.

Section 5: From the date the work plan is approved by both parties; please provide the Utility's pre-construction scheduling information. [IAC 13-3-3(c) (4), IAC 13-3-3(c) (5)]

A.	The expected lead time in calendar days to obtain required permits:	**60 Days**
B.	The expected lead time in calendar days to obtain materials:	**60 Days**
C.	The expected lead time in calendar days to schedule work crews (Scheduling is not included within the Pre-Construction Activity time line below):	**60 Days (Minimum)**
D.	If the contractor is being selected by competitive bid what is the date of selection?	**Not Applicable**
E.	The expected lead time in calendar days to obtain new property interests:	**Hamilton County to obtain all ROW**
F.	The earliest date when the utility could begin to implement the pre-construction activities of the work plan:	**Material Reservation Contingent on Work Plan Approval. Scheduling Contingent on Notice to Proceed**
G.	The total number of calendar days for pre-construction activities (accounting for concurrent activities) and not including Scheduling of Construction crews:	**60 Days**

Section 6: The Utility Construction Scheduling Information. [IAC 13-3-3(c) (4), IAC 13-3-3(c) (5)]

A. A statement whether the facility relocation is or is not dependent on work to be done by another utility with a description of that work. [IAC 13-3-3(c)(2)(A)(i)]

N/A.

B. A statement whether the facility relocation is or is not dependent on work to be done by the Hamilton County or the Hamilton County's contractor with a description of that work. [IAC 13-3- 3(c)(2)(A)(ii)]

Work item A
Hamilton County will give written notice to Duke Energy that all "possessory rights" have been acquired for the entire length of the approved work plan area before relocation construction begins.

Work item B
Hamilton County will work closely with Duke Energy to safely clear all trees, shrubs and structures (from sky to ground) at INDOT OR LPA's cost, for the entire length of the approved relocation plan area, including areas sufficiently beyond the construction limits to accommodate the approved relocation work plan before relocation construction begins.

Work item C
Hamilton County will notify Duke Energy after staking (A or B):

A. Hamilton County ROW limits every 100 ft with station identification before relocation construction begins along with every corner/turn in the R/W.

B. Station and offset identification provided by Duke Energy for each Duke Energy facility before location construction begins.

Work item D
Hamilton County will provide signed copies of all reimbursement agreements before Relocation construction begins. NOT APPLICABLE

Work item E
Hamilton County will provide Duke Energy a "Signed" work plan on or before as the ready for contracts date.

Work item F
Hamilton County will provide Duke Energy a "Letter to Proceed" on or before the ready for contracts date but no event later than the required pre-construction lead time prescribed in Sections 5 F & G.

In the event that Duke Energy Indiana decides to hold, protect or guard its installed facilities before, after or during relocation construction, for the safe installation of another facility or utility, Duke Energy Indiana will notify Hamilton County immediately. Because time is of the essence, the Hamilton County and Duke Energy Indiana agree to work together to minimize costs and delays for all parties involved, and Duke Energy Indiana agrees to not proceed until an agreement is reached with Hamilton County regarding reimbursement of Duke Energy Indiana's costs for holding protecting or guarding its facilities.

C. How many calendar days after the events identified in Sec 6 A and B are completed can the utility begin construction:
Absent an agreement expediting the work between Hamilton County and Duke Energy Indiana, the earliest date when Duke Energy Indiana could begin construction.

1.) **If the county ROW staking and clearing is contained in the county's construction contract, Duke Energy Indiana will begin construction within 60 days after Duke Energy Indiana has received from Hamilton County both a "Notice to Proceed" (confirming the staking and clearing has been completed) and a fully executed Work Plan.**

If the county ROW staking and clearing is let as a separate contract, Duke Energy Indiana will begin construction within 60 days after Duke Energy Indiana has received from Hamilton County both a "Notice to Proceed" (confirming the staking and clearing has been completed) and a fully executed Work Plan.

If at any time within 120 days from the most current published letting date, the Hamilton County changes the letting date by more than fourteen (14) days, Duke Energy Indiana reserves the right upon written notice sent by mail to the INDOT OR LPA, to provide to the county a revised work plan within 60 days from the date Duke Energy Indiana is notified of the change.

D. The number of calendar days to complete the relocation work: **90 Days**

Section 7: A drawing of sufficient detail with station, offset, elevations, and scale to show the proposed location of the facility relocation, which takes precedence over the narrative description of the work. [IAC 13-3-3(c) (6)].

See Exhibit A.

Section 8: For each work plan the utility shall include a cost estimate for the facility relocation. For reimbursable work the estimate will identify betterment and salvage, which is not reimbursable. [IAC 13-3-3(d)]

Not Applicable.

Section 9: For work the utility is entitled to be compensated by the Department, the work plan shall include documentation of property interests and compensable land rights. [IAC 13-3-3(d)]

Not Applicable.

Section 10: The implementation of this approved work plan is dependent upon the issuance of: (a notice to proceed will be provided when items in Section 6 are accomplished)

Items Completed	Yes	Not Applicable
An executed reimbursement agreement with Hamilton County:	☐	☒
A relocation permit from Hamilton County:	☒	☐

(Note: Double-click on box in Yes or NA to mark it with an "X")

Submitter Signature

9/1/2020
Date

Luis Alvarez
Submitter Name Printed

Hamilton County use only below this point ---------- Hamilton County use only below this point

The following sections are to be used by county personnel to review the utility relocation work plan.

Section 11: The Department shall review the work plan to ensure that it: [IAC 13-3-3(e)]

Description	Yes	No	Initials
(1.a) is compatible with department permit requirements	☒	☐	MDF
(1.b) is compatible with the project plans	☒	☐	MDF
(1.c) is compatible with the construction schedule	☒	☐	MDF
(1.d) is compatible with other utility relocation work plans	☒	☐	MDF
(2.a) has reasonable relocation scheme	☒	☐	MDF
(2.b) has a reasonable cost for compensable work	☒	☐	MDF

(**Note**: Double-click on box under Yes or No to mark it with an "X")

Comments on any sections (1.a – 2.b) that were marked No:

Michael D. Franco
Reviewer Signature

11/24/20
Date

MICHAEL D. FRANCO
Reviewer Name Printed

Section 12: Approved Work Plan. [IAC 13-3-3(f)]

I have reviewed the work plan and found it acceptable.

Aaron Goslee
Project Manager Signature

11/24/2020
Date

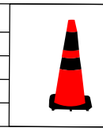
Aaron Goslee
Project Manager Name Printed

SAFETYFirst
- PERSONAL ACCOUNTABILITY
- ACTIVE CARING
- HAZARD RECOGNITION

Upstream Protection
Type(recloser, breaker, sectionalizer), ID, Location
.
.
.

CIRCLE FOR SAFETY — DUKE ENERGY.

Safety Reminders / Adverse Conditions
Remember "Your Circle of Safety"
.
.
.



REMEMBER: Work zone area conditions may have changed for this job. Everyone is responsible for verifying the safety information is correct prior to any work being performed each day.

Other Project Notes
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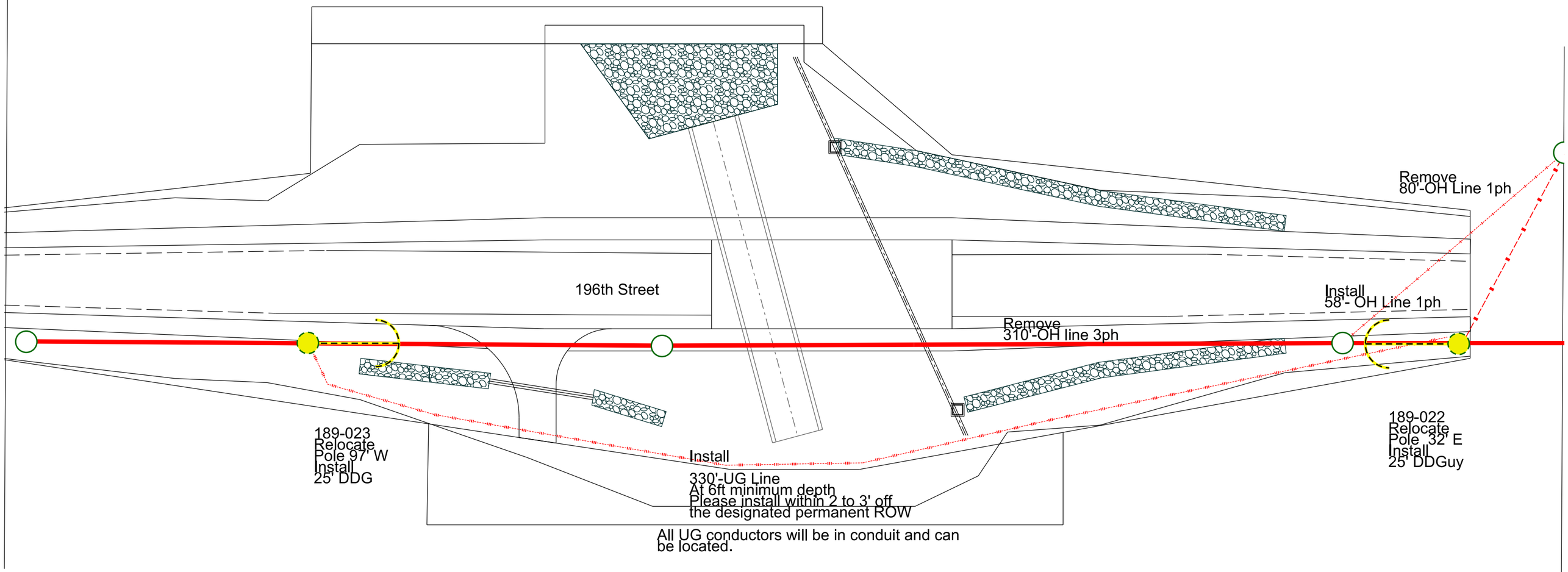

N

General Information	
INDOT DES #	
Hamilton Co- 196th St Bridge Replacement	
Noblesville	
Hamilton County, IN	

Work Order Information					
Distribution					
Emax #	Install	Remove	OH Maint.	UG Maint.	OU / Center
Transmission					
Emax #	Install	Remove	OH Maint.	UG Maint.	OU / Center
N/A	N/A	N/A	N/A	N/A	N/A

Circuit Information
Distribution
Transmission
N/A
N/A

Duke Energy Legend			
Existing Duke Pole		Existing Downguy	
Proposed Duke Pole		Proposed Downguy	
Remove Duke Pole		Transmission Line	
Existing Foreign Pole		Distribution Line	
Proposed Foreign Pole		Secondary Line	
Remove Foreign Pole		Overhead Light	

ILLNESS ZERO INJURY

811 Know what's below. Call before you dig.

DUKE ENERGY.

INDEX	12kv Distribution Line
DETAIL	Hamilton Co- 196th St Bridge Replacement
DATE 7/20/2020	LOCATION
DRAWN Luis Alvarez	PHONE 765.431.6169
ELECTRIC TRANSMISSION & DISTRIBUTION LINE ENGINEERING	APPROVAL SIGNATURE
	DWG NO SHEET OF

Date: 8-28-19

Subject:

Utility Relocation Work Plan for:	City of Noblesville Utilities
Facility Type:	Sanitary and Storm Sewer

Section 1: General Information

A. HAMILTON COUNTY Project Information

1.	DES NO.:	N/A
2.	Route Number:	196th Street Small Structure Replacement over Dry Branch or Musselman Ditch
3.	Location:	0.27 E of Promise Road
4.	Work Type:	Small Structure Replacement / Reconstruction of Roadway Approaches
5.	Letting Date:	September 2, 2020
6.	Date Work Plan Needed	March 2, 2020
7.	Target Date for Utility to be out of conflict with HAMILTON COUNTY Project	September 2, 2020
	Intermediate Phase	Enter Target Date
	Intermediate Phase	Enter Target Date

B. Utility Designated Contact – Information

1.	Designated Contact Name:	Kirk Staley
2.	Office telephone:	317-776-6353
3.	Mobile telephone:	N/A
4.	Email address:	kstaley@noblesville.in.us
5.	Agency name	City of Noblesville Utilities
6.	Address:	197 Washington
7.	City, State, Zip Code:	Noblesville, IN 46060
8.	Construction Emergency Contact:	
	Name:	On Call
	Number:	317-557-8367

C. By signing here, the Utility has determined to the best of their ability that they do not have facilities within the project area:

Signature of Utility Representative

Kirk Staley — Print Name

8/28/19 — Date

Note: A signature by the utility representative at item "(C)" fulfills the requirement to complete the rest of this form and affirms their contact information above is correct

Duke Energy Transmission

Date: 1/23/2020

Subject: D u k e E n e r g y

Utility Relocation Work Plan for:	Duke Energy
Facility Type:	Electric Transmission

Section 1: General Information

A. HAMILTON COUNTY Project Information

1.	DES NO.:	N/A
2.	Route Number:	196th Street Small Structure Replacement over Dry Branch or Musselman Ditch
3.	Location:	0.27 E of Promise Road
4.	Work Type:	Small Structure Replacement / Reconstruction of Roadway Approaches
5.	Letting Date:	September 2, 2020
6.	Date Work Plan Needed	May 10, 2020
7.	Target Date for Utility to be out of conflict with HAMILTON COUNTY Project	September 2, 2020
	Intermediate Phase	-
	Intermediate Phase	-

B. Utility Designated Contact – Information

1.	Designated Contact Name:	Dwayne Wright
2.	Office telephone:	317-838-2044
3.	Mobile telephone:	N/A
4.	Email address:	Dwayne.Wright@Duke-Energy.com
5.	Agency name	Duke Energy
6.	Address:	1000 E. Main St
7.	City, State, Zip Code:	Plainfield, IN 46168
8.	Construction Emergency Contact:	
	Name:	Dwayne Wright
	Number:	317-838-2044

C. By signing here, the Utility has determined to the best of their ability that they do not have facilities within the project area:

Dwayne Wright Dwayne Wright 1/23/2020

Signature of Utility Representative Print Name Date

Note: A signature by the utility representative at item "(C)" fulfills the requirement to complete the rest of this form and affirms their contact information above is correct

INDIANA
AMERICAN WATER

Date: August 4, 2019

Subject:

Utility Relocation Work Plan for:	Indiana-American Water Company
Facility Type:	Water

Section 1: General Information

A. HAMILTON COUNTY Project Information

1.	DES NO.:	N/A
2.	Route Number:	196th Street Small Structure Replacement over Dry Branch or Musselman Ditch
3.	Location:	0.27 E of Promise Road
4.	Work Type:	Small Structure Replacement / Reconstruction of Roadway Approaches
5.	Letting Date:	September 2, 2020
6.	Date Work Plan Needed	March 2, 2020
7.	Target Date for Utility to be out of conflict with HAMILTON COUNTY Project	September 2, 2020
	Intermediate Phase	Enter Target Date
	Intermediate Phase	Enter Target Date

B. Utility Designated Contact – Information

1.	Designated Contact Name:	Amrit Singh
2.	Office telephone:	317-807-2469
3.	Mobile telephone:	317-995-3801
4.	Email address:	Amrit.singh@amwater.com
5.	Agency name	Indiana-American Water Company
6.	Address:	153 N. Emerson Ave
7.	City, State, Zip Code:	Greenwood, IN 46143
8.	Construction Emergency Contact:	
	Name:	Josh Cox
	Number:	765-432-1150

C. By signing here, the Utility has determined to the best of their ability that they do not have facilities within the project area:

Signature of Utility Representative

Amrit Singh — Print Name

08/04/2019 — Date

Note: A signature by the utility representative at item "(C)" fulfills the requirement to complete the rest of this form and affirms their contact information above is correct

Date: 07/19/19

Subject:

Utility Relocation Work Plan for:	Vectren-A CenterPoint Energy Company
Facility Type:	Natural Gas

Section 1: General Information

A. HAMILTON COUNTY Project Information

1.	DES NO.:	N/A
2.	Route Number:	196th Street Small Structure Replacement over Dry Branch or Musselman Ditch
3.	Location:	0.27 E of Promise Road
4.	Work Type:	Small Structure Replacement / Reconstruction of Roadway Approaches
5.	Letting Date:	September 2, 2020
6.	Date Work Plan Needed	March 2, 2020
7.	Target Date for Utility to be out of conflict with HAMILTON COUNTY Project	September 2, 2020
	Intermediate Phase	Enter Target Date
	Intermediate Phase	Enter Target Date

B. Utility Designated Contact – Information

1.	Designated Contact Name:	Shawn Williams
2.	Office telephone:	317-776-5574
3.	Mobile telephone:	317-790-8475
4.	Email address:	Shawn.williams@centerpointenergy.com
5.	Agency name	Vectren-A CenterPoint Energy Company
6.	Address:	16000 Allisonville RD PO Box 1700
7.	City, State, Zip Code:	Noblesville, IN 46060
8.	Construction Emergency Contact:	
	Name:	Vectren 24 Hr Call Center
	Number:	1-800-227-1376

C. By signing here, the Utility has determined to the best of their ability that they do not have facilities within the project area:

Shawn Williams

Signature of Utility Representative

Shawn Williams **07/19/19**

Print Name Date

Note: A signature by the utility representative at item "(C)" fulfills the requirement to complete the rest of this form and affirms their contact information above is correct